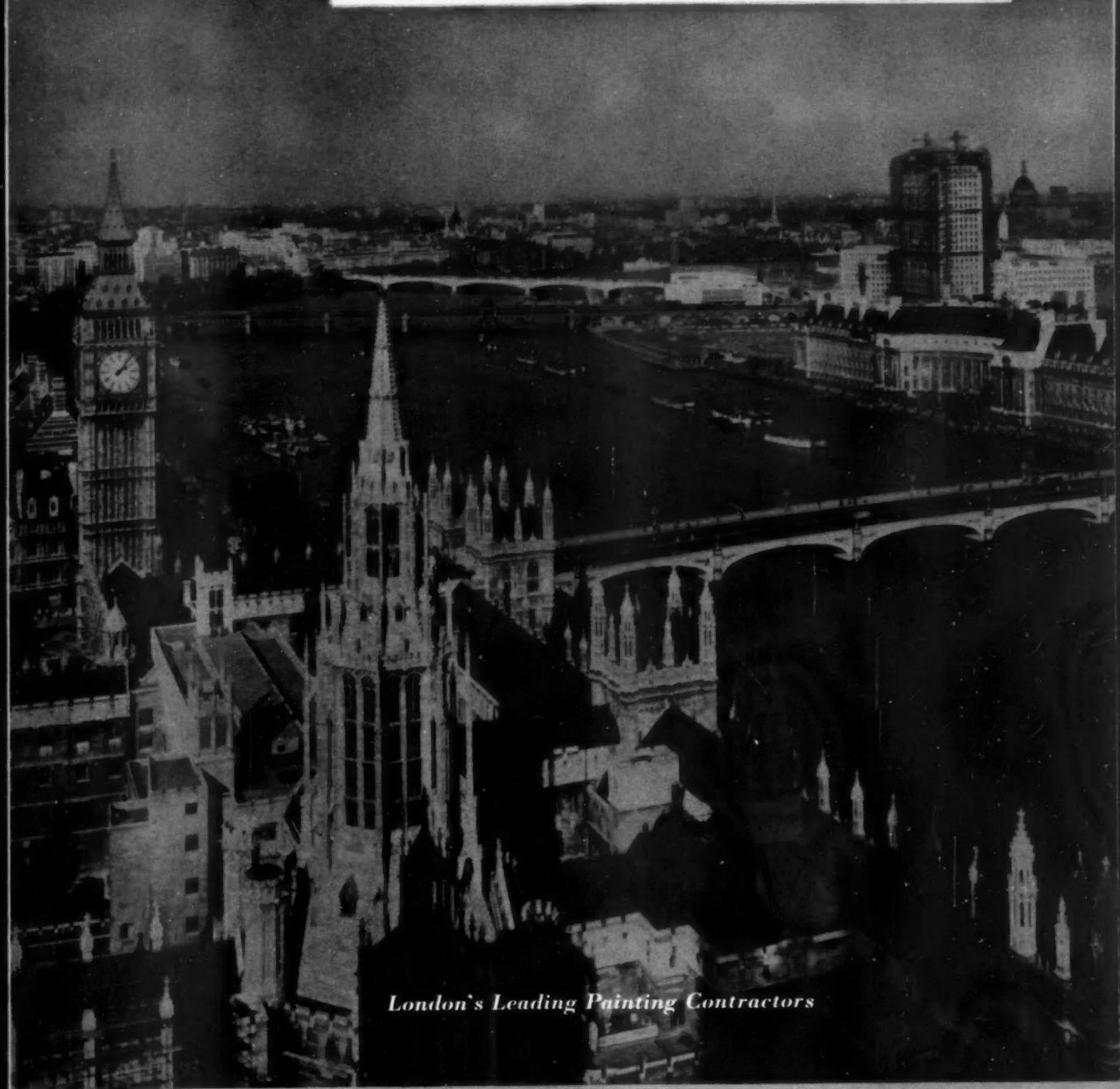
The Builder

A NEWSPAPER FOR THE ARCHITECT AND CONSTRUCTOR

NO. 6170 119TH YEAR. FRIDAY, AUGUST 18, 1961. Price 1/6.



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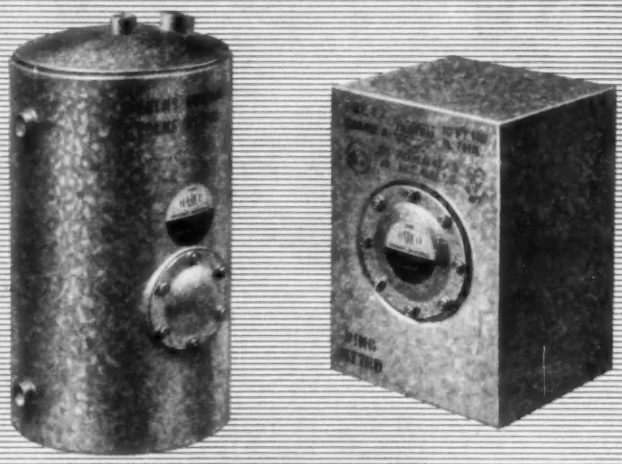

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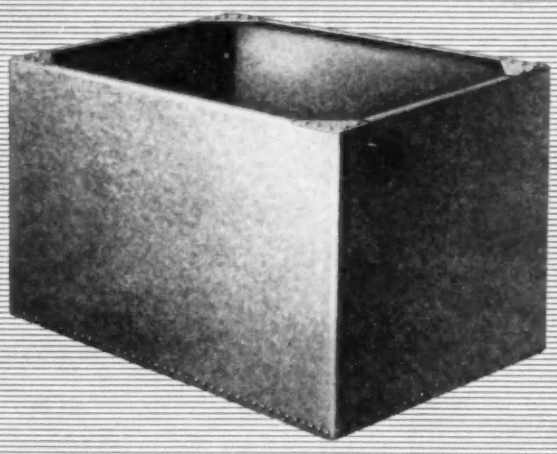

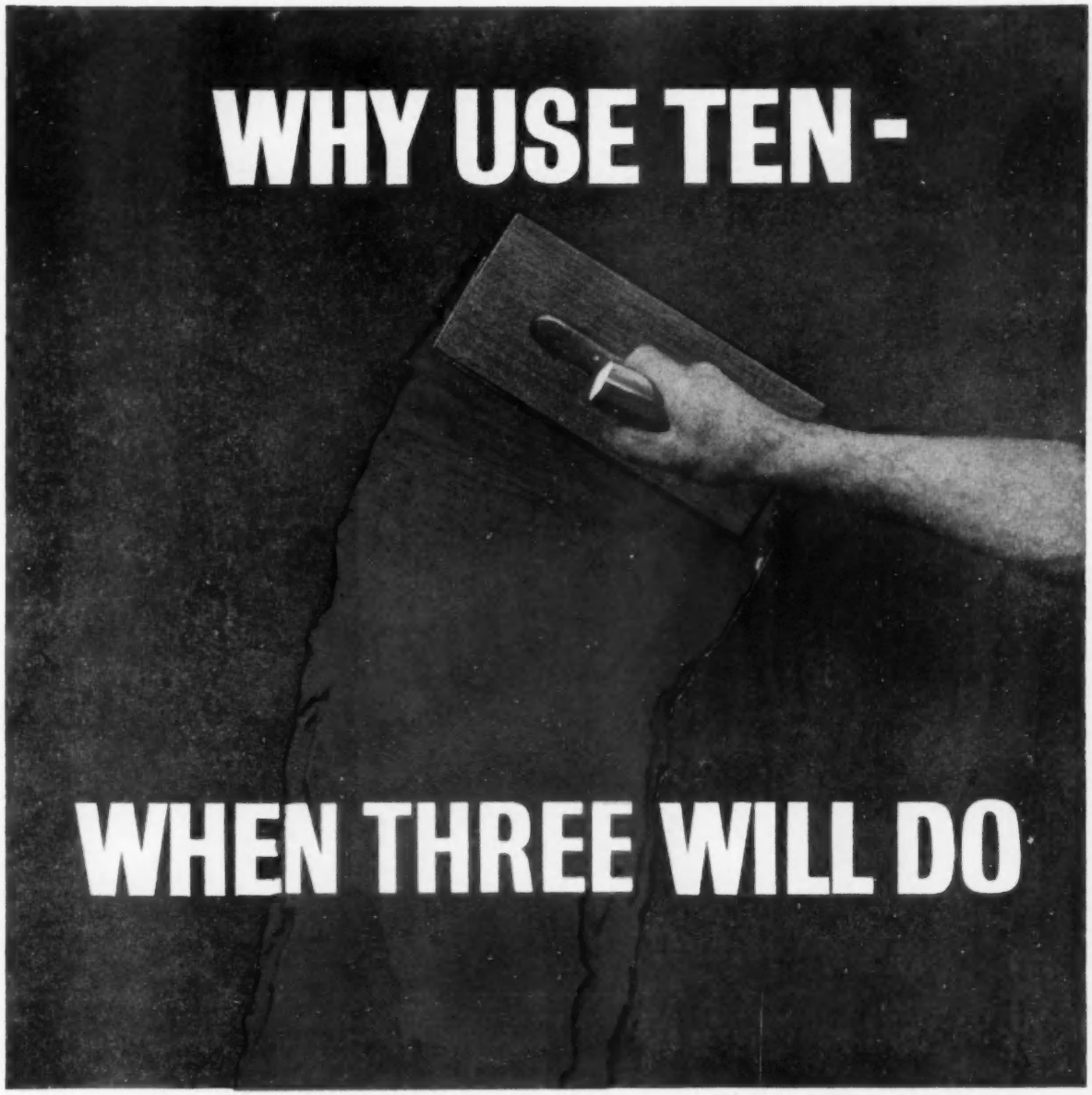

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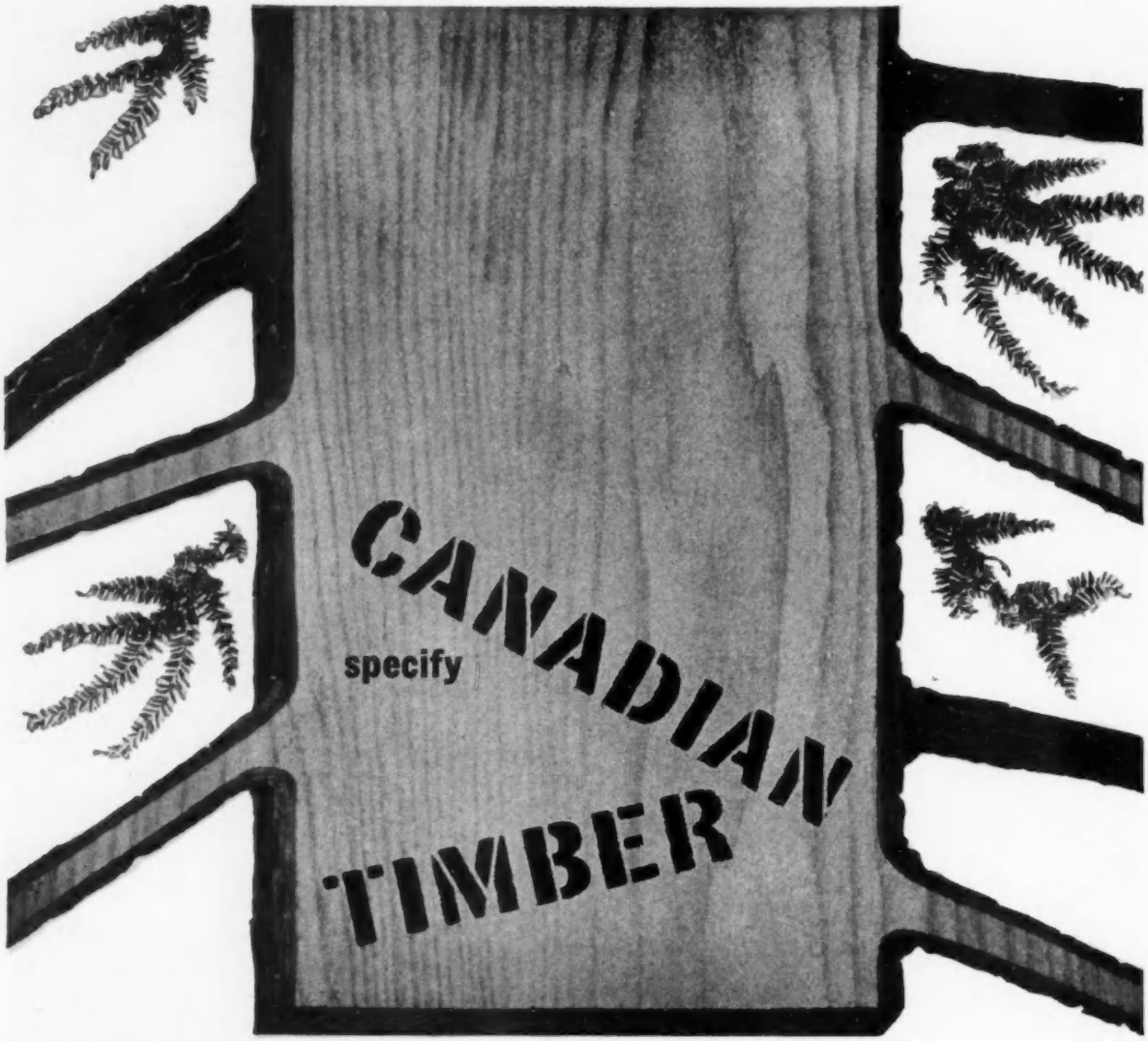

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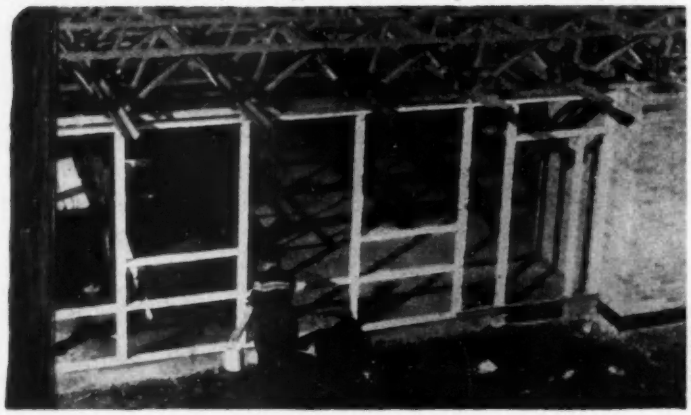

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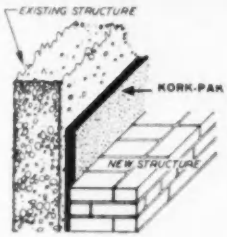

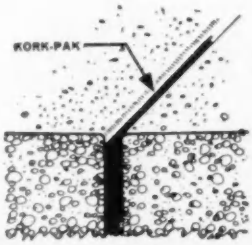

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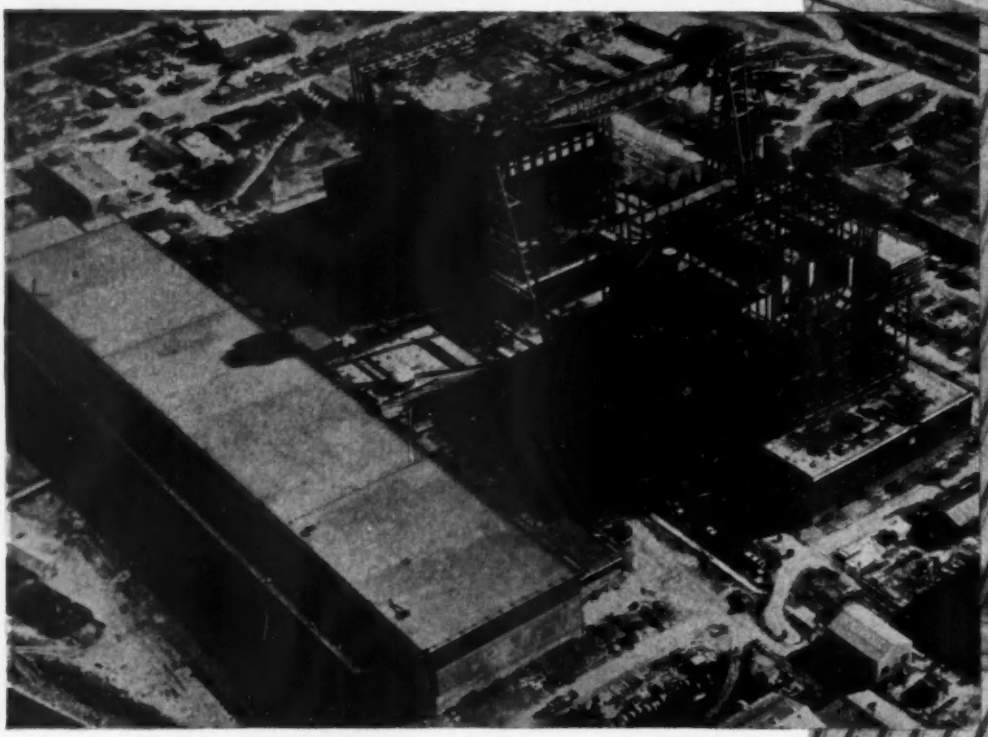

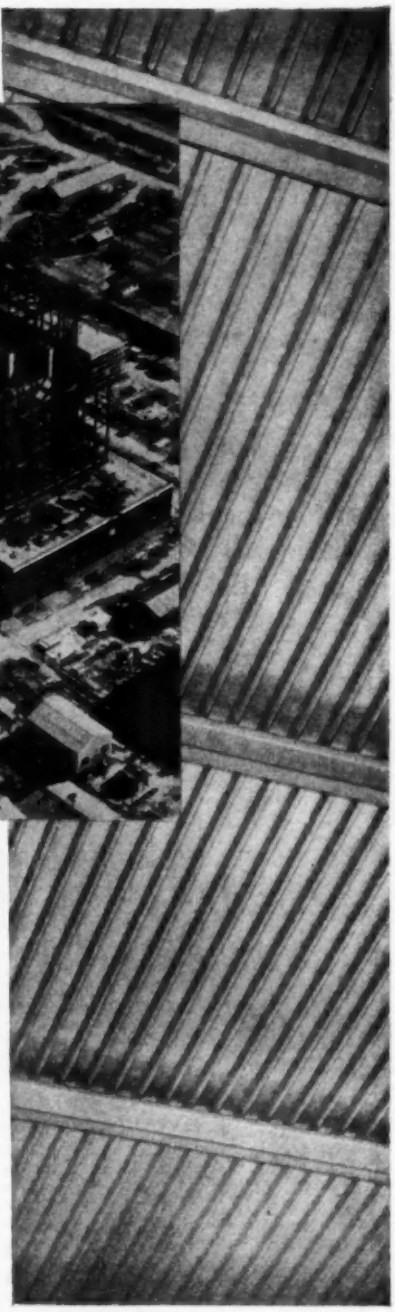

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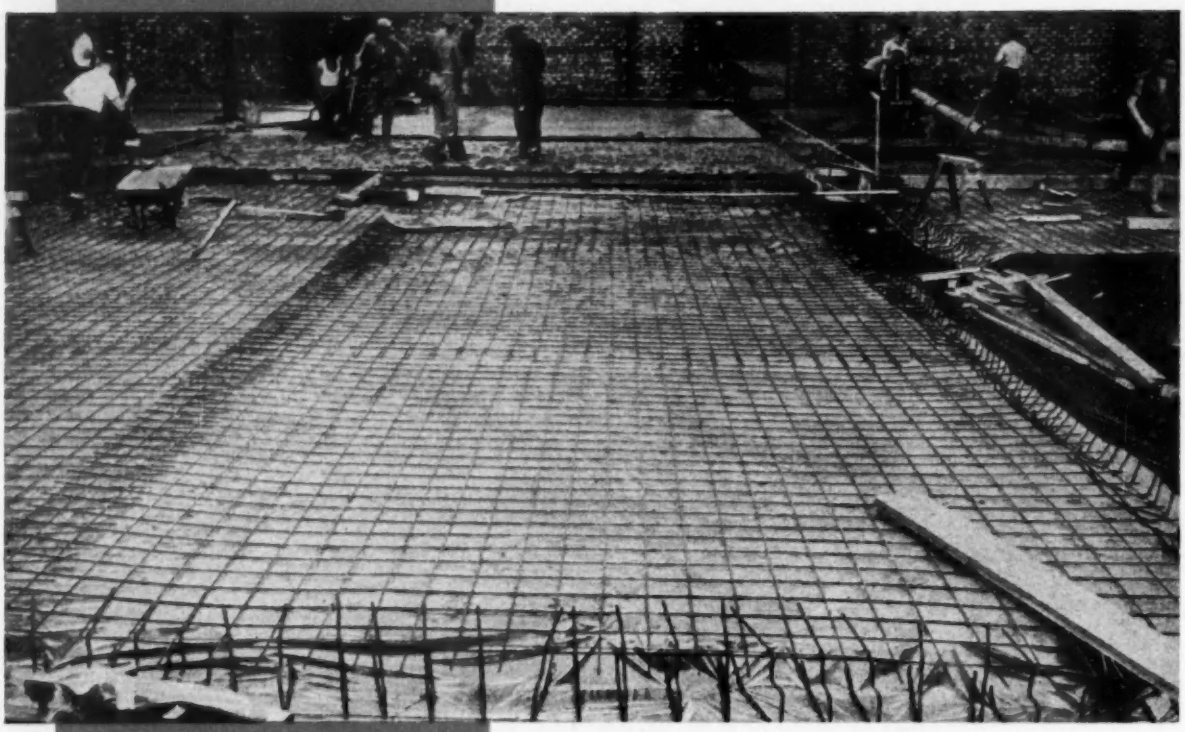
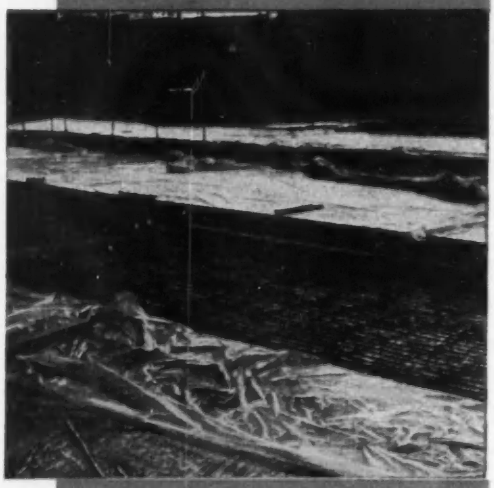


18 ft. wide 'Visqueen' 250 (mediumweight) laid under the ground floor slab of the new Pressed Steel factory at Swansea. Altogether 65,000 sq. yds. of 'Visqueen' were used on this site. *Architect:* Harry W. Weedon, F.R.I.B.A. & Partners. *Contractor:* Sir Robert McAlpine & Sons (South Wales) Ltd.



The monolithic grano-finish flooring of the L.T.E. Bus Garage, Stevenage, being cured with 'Visqueen' 150 (lightweight). 'Visqueen' was also specified on this contract as a separation membrane between the ash formation and blinding of the perimeter track and parking areas. *Architect:* Thomas Bilbow, F.R.I.B.A. (Chief Architect to the L.T.E.). *Contractor:* Gilbert-Ash Ltd.

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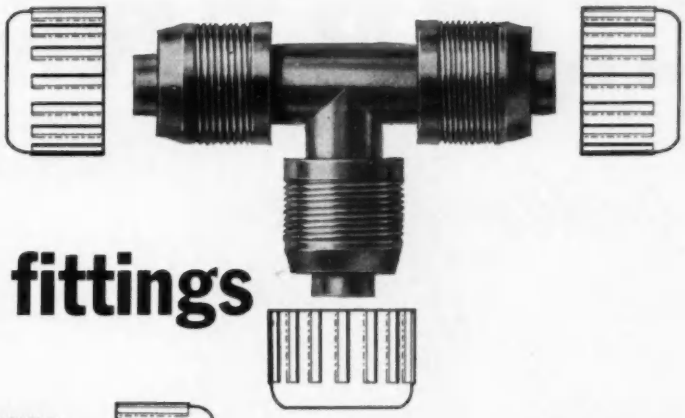

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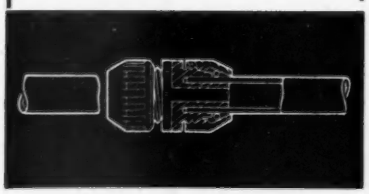

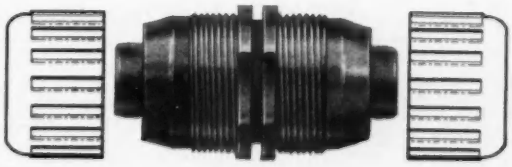

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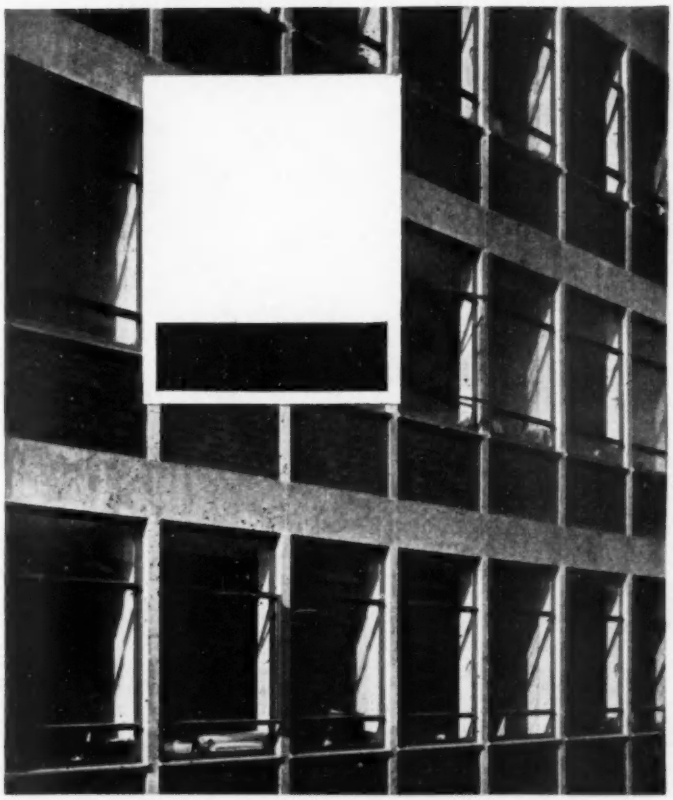

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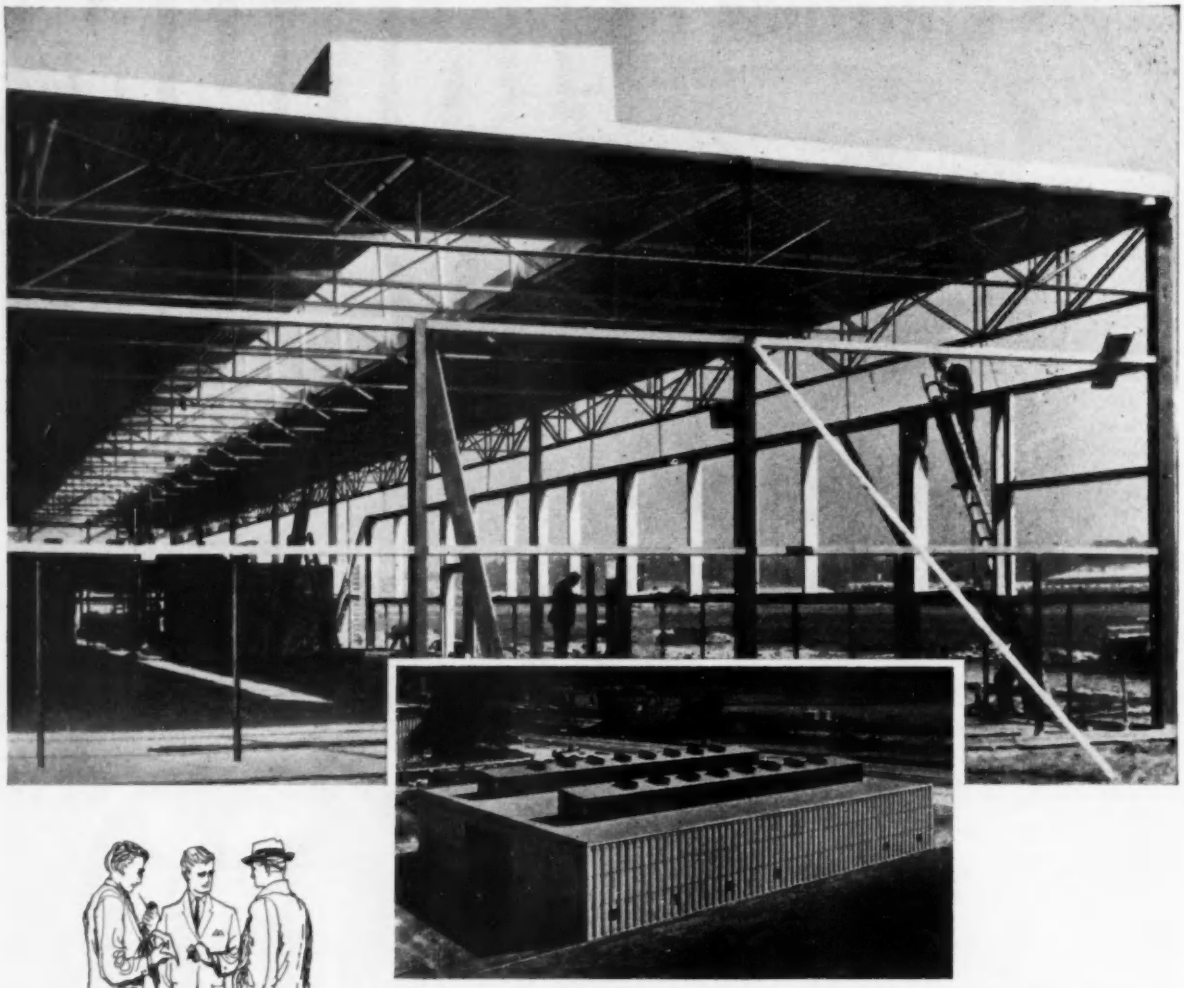

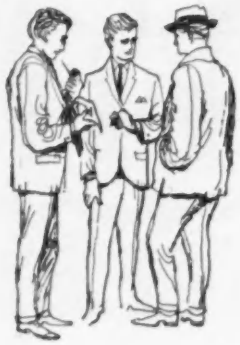

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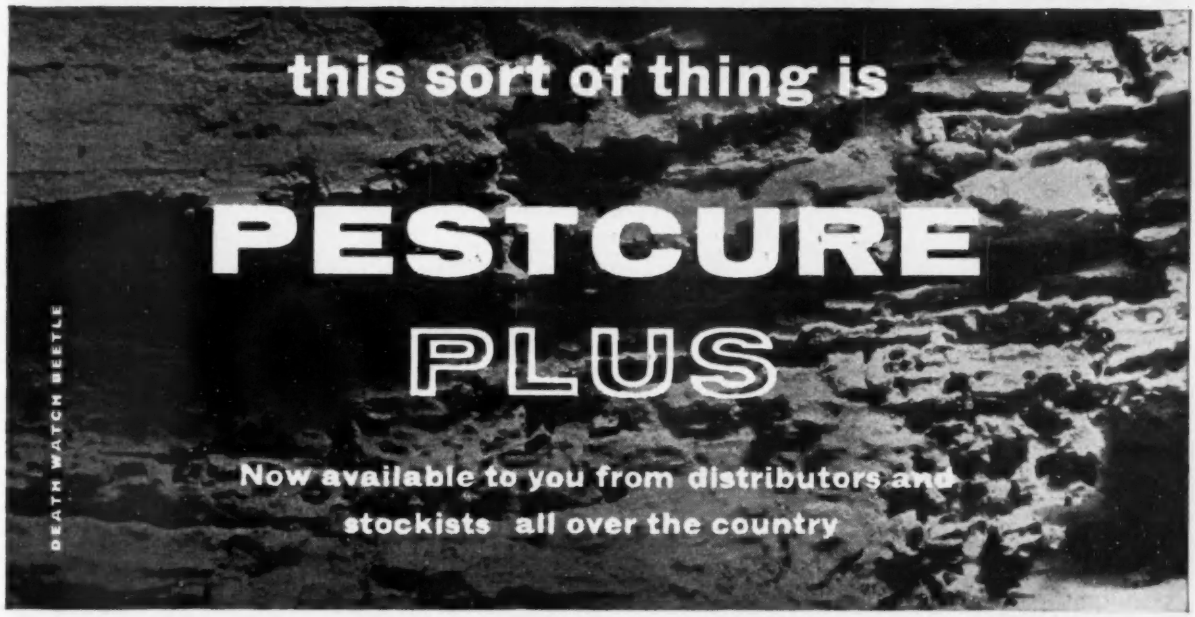

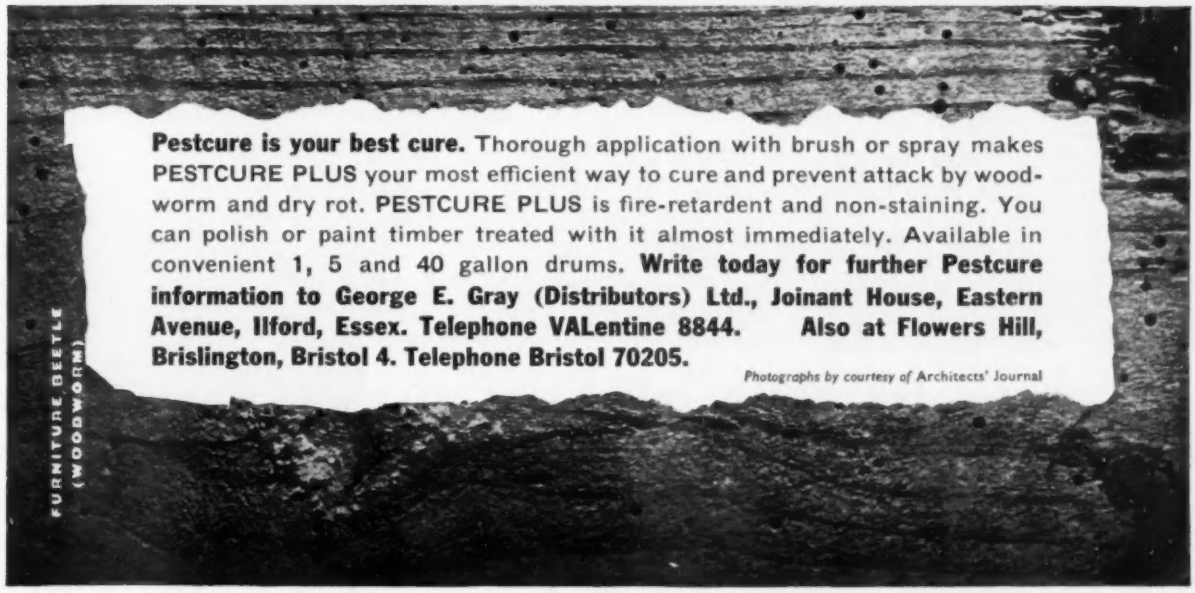

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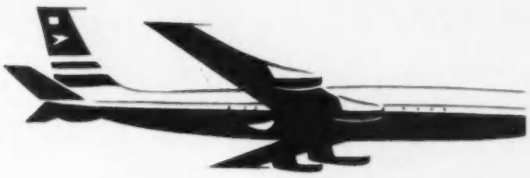

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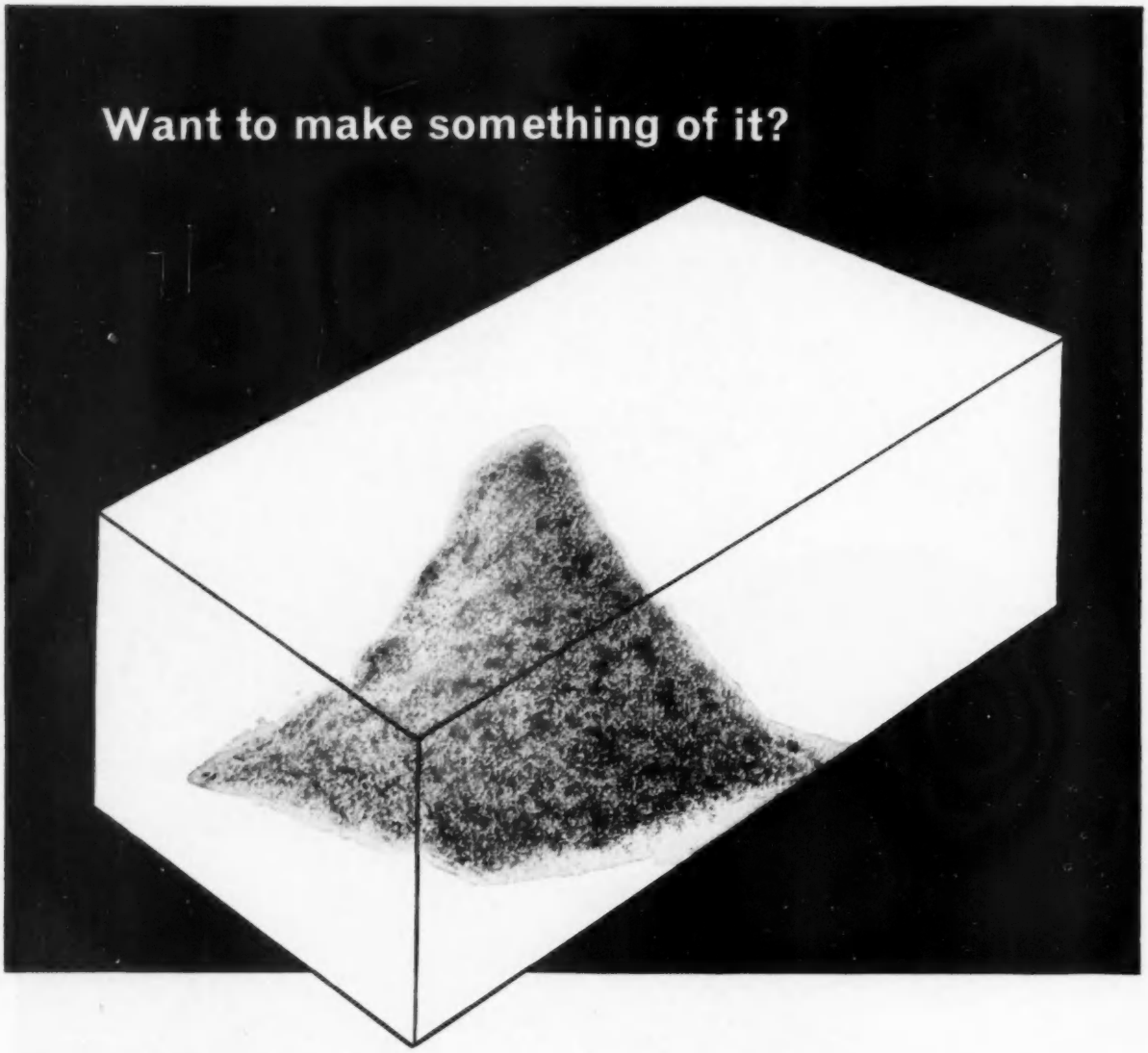

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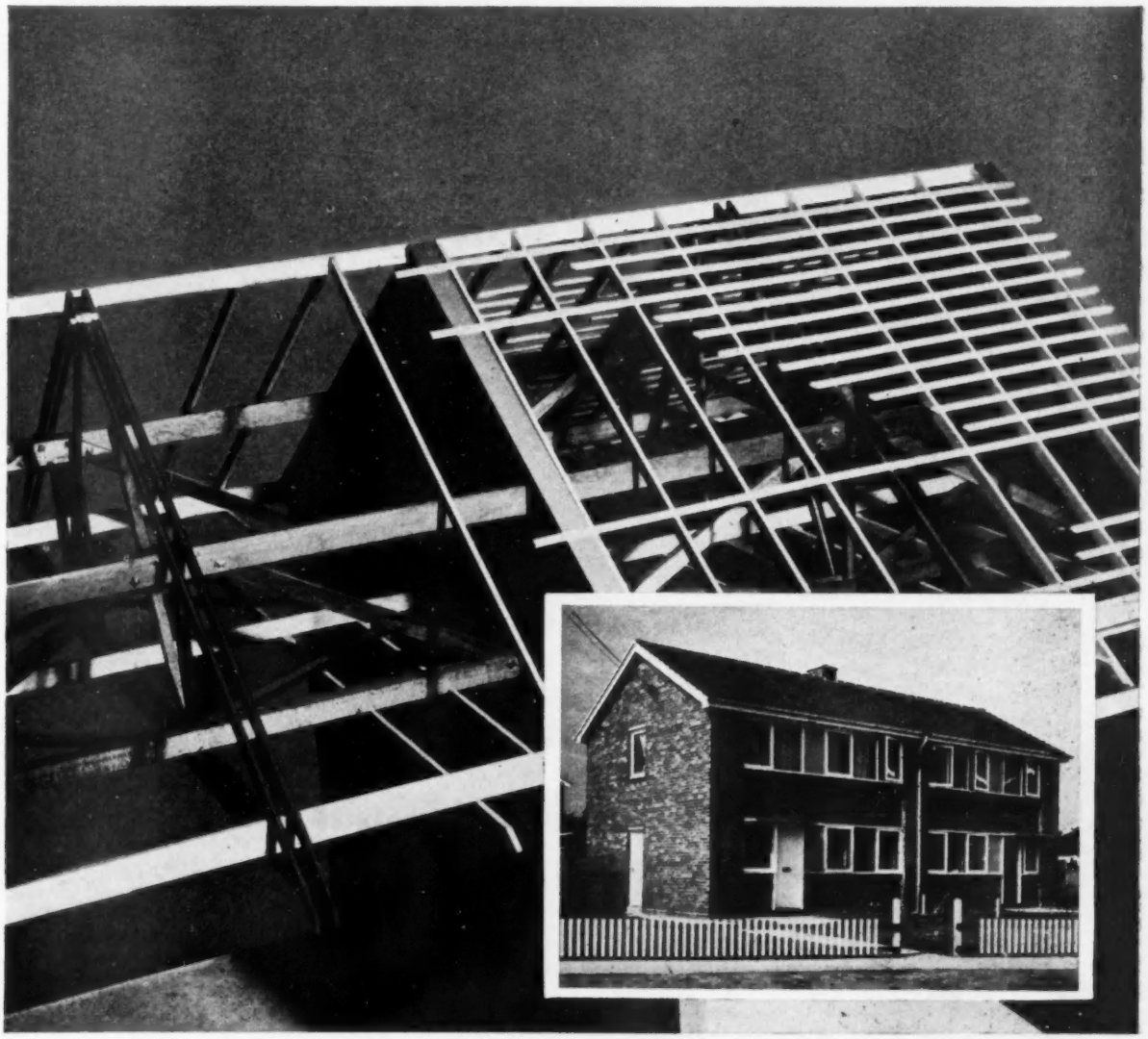

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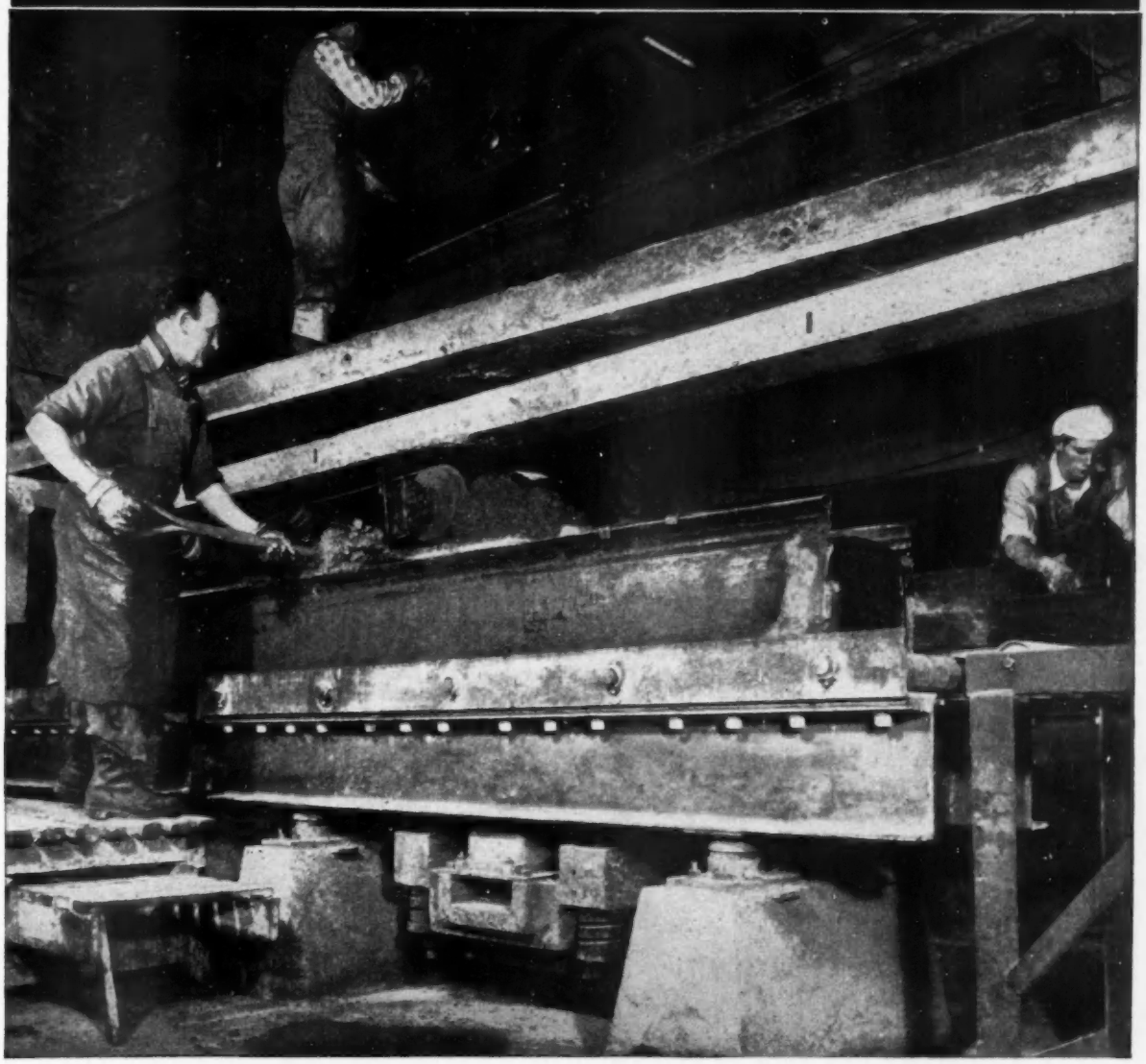

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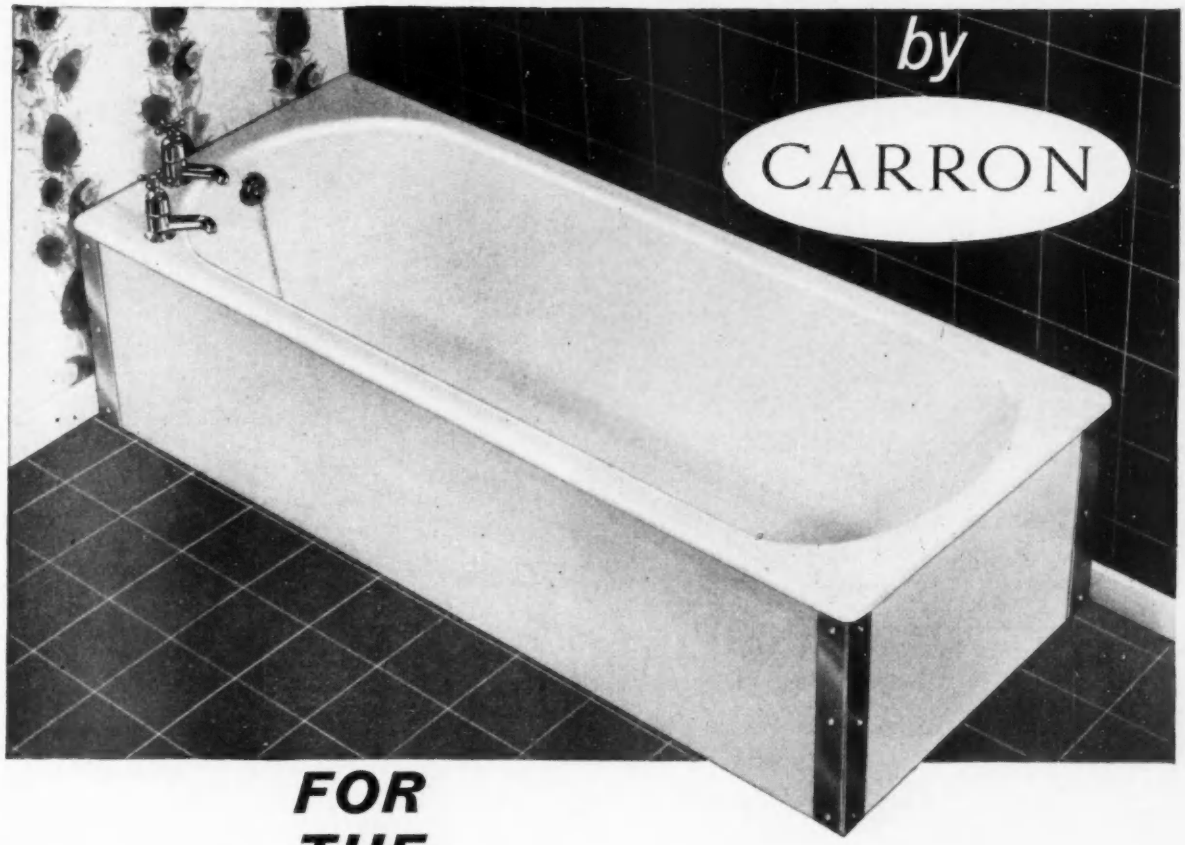

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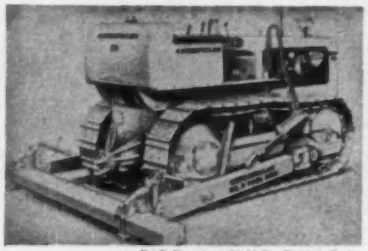
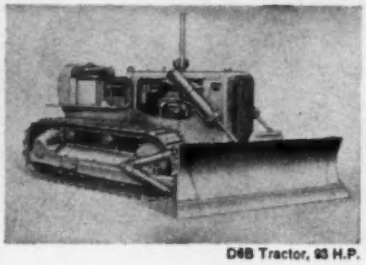
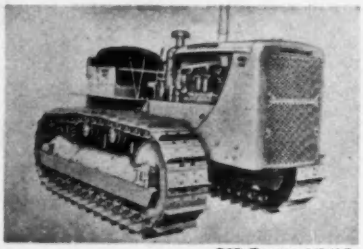


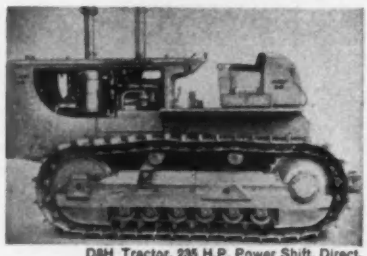
D4C Tractor, 65 H.P., British Built



D6B Tractor, 93 H.P.



D7D Tractor, 140 H.P.



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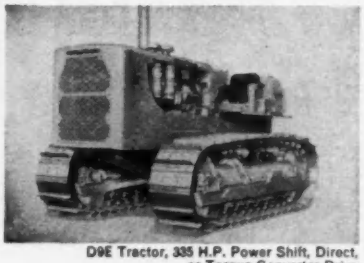

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463F Scraper, 28 cu. yd. heaped capacity, British Built

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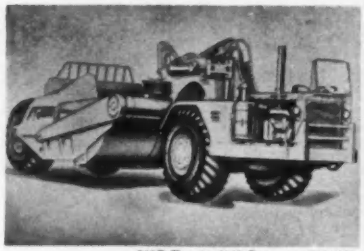

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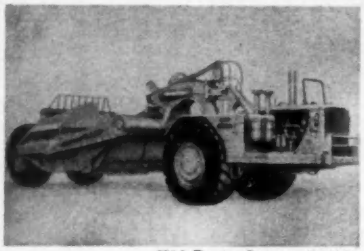
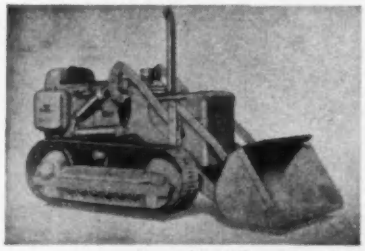


631A Tractor Scraper, 420 H.P. 28 cu. yd. heaped capacity



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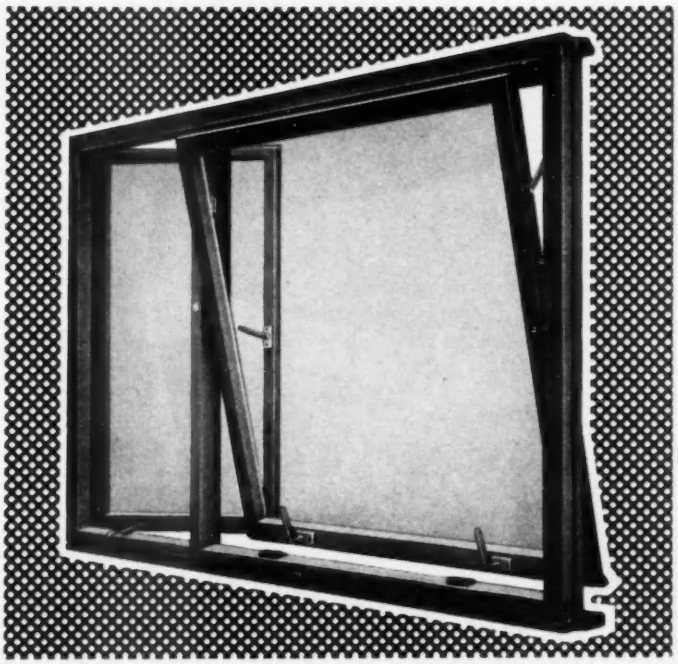

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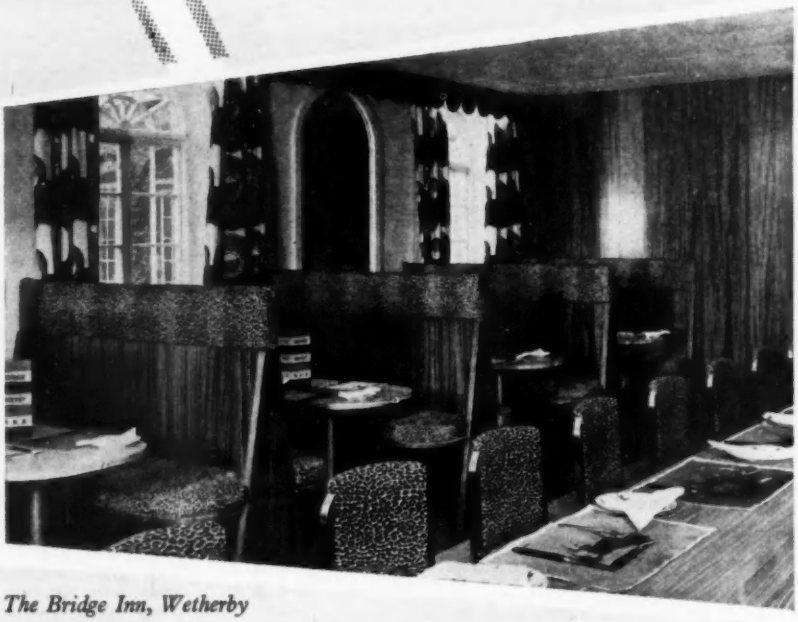

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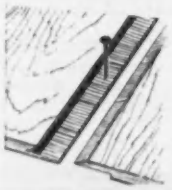

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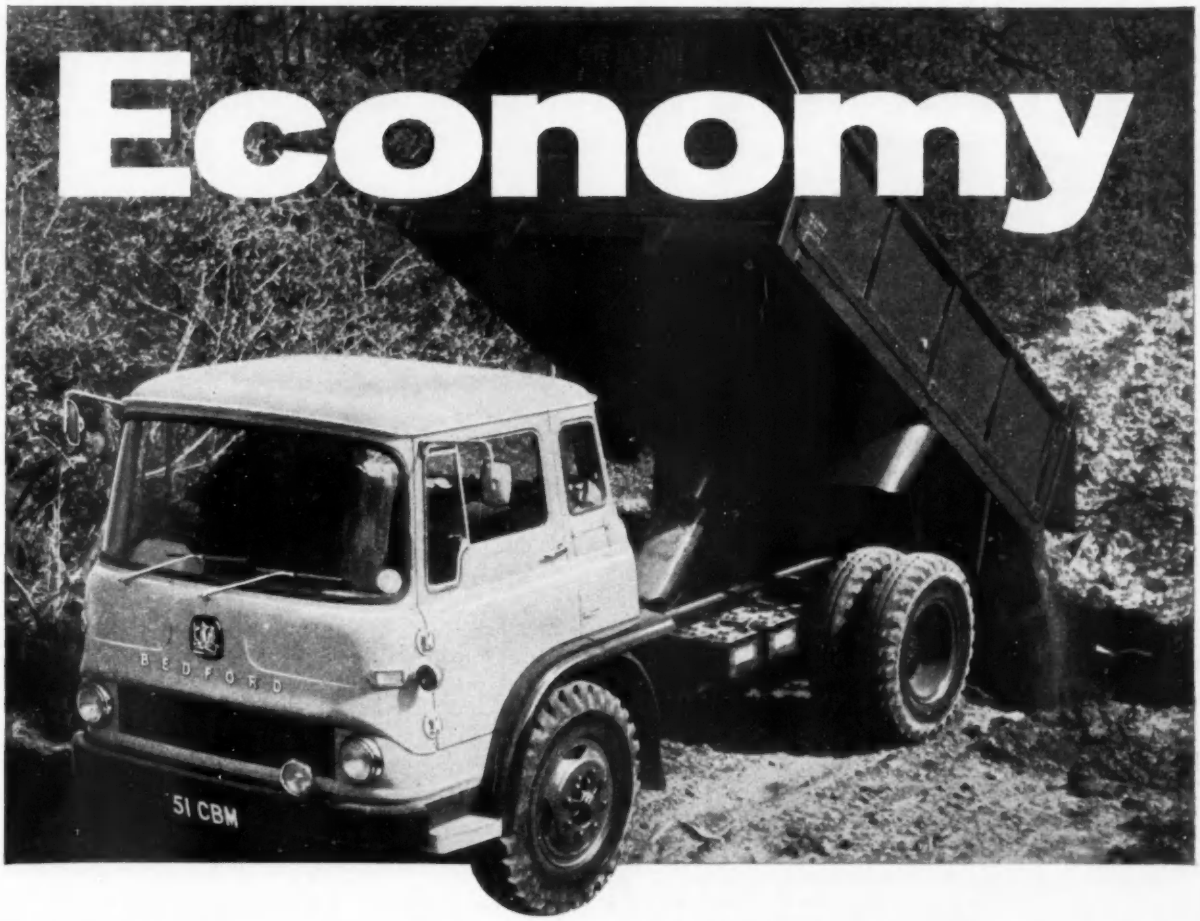

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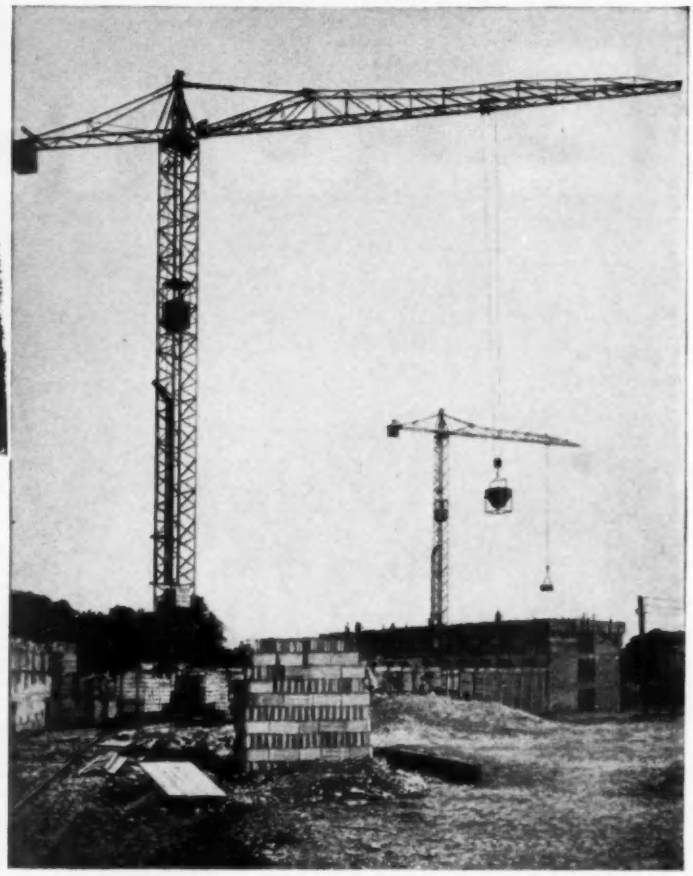

TYPE G 15 HV-A Available as a travelling, fixed-base, expendable-base, or climbing crane. Positive gear-drives throughout. Choice of 3 jib lengths:—

Safe working load	Jib lengths
Also available with a jib length of 80′.	
15 cwt.	65 ft. 7 in.
20 cwt.	55 ft. 9 in.

Maximum, 40 cwt. at 24 ft. 7 in. limit.

Maximum height for mobile working:	95 ft. 2 in.
Height, with 10 tower sections, anchored:	147 ft. 7 in.
Rail centres:	9 ft. 2½ in.
Working weight, 95 ft. high, with ballast:	30·9 tons

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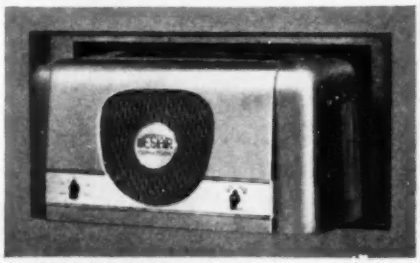

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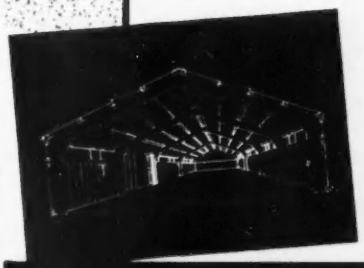

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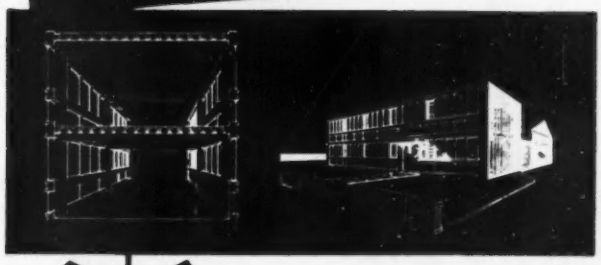

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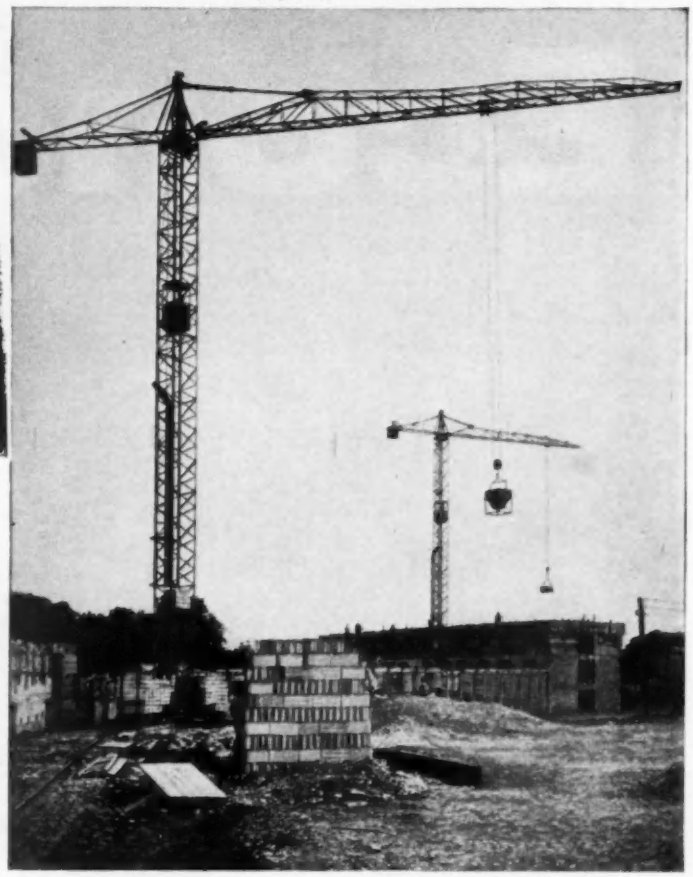

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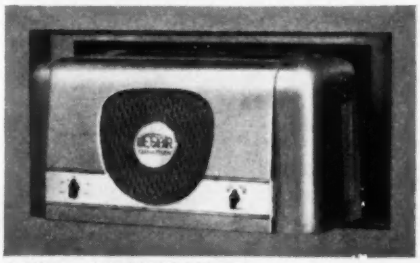

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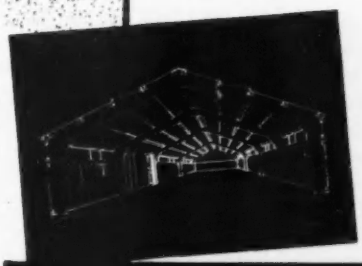

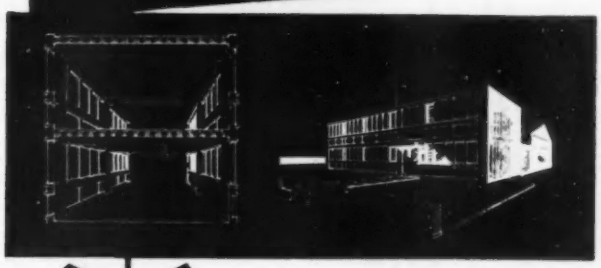

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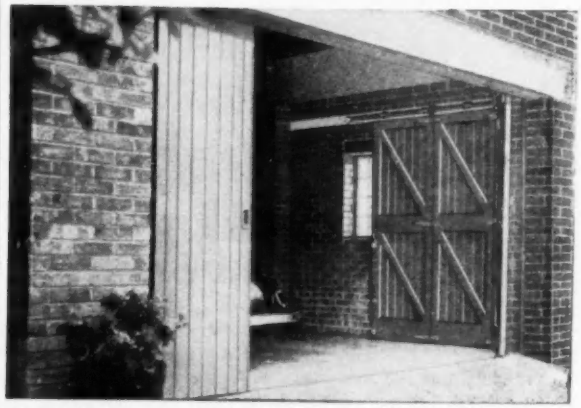

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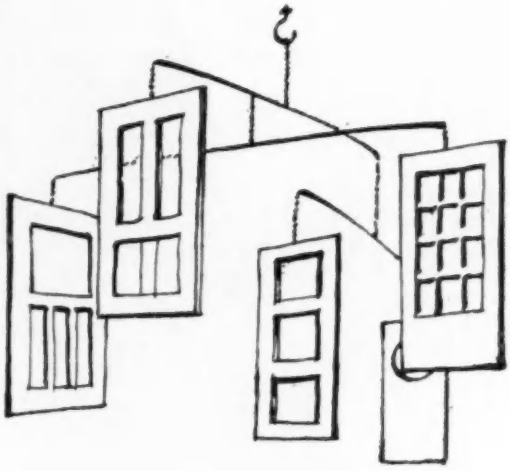

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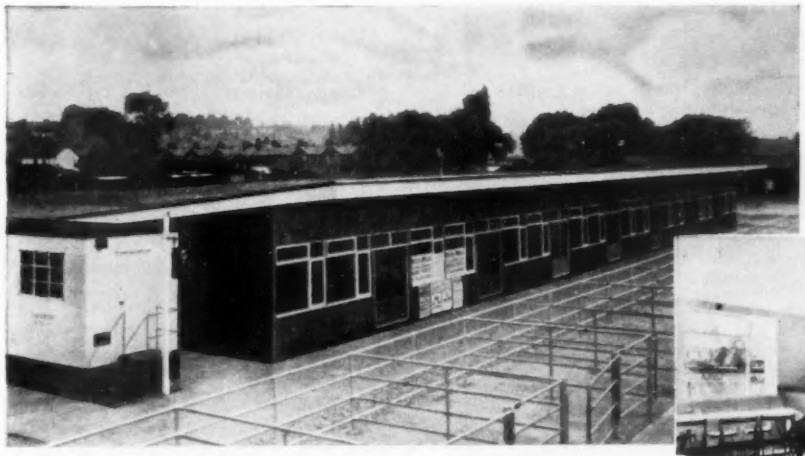

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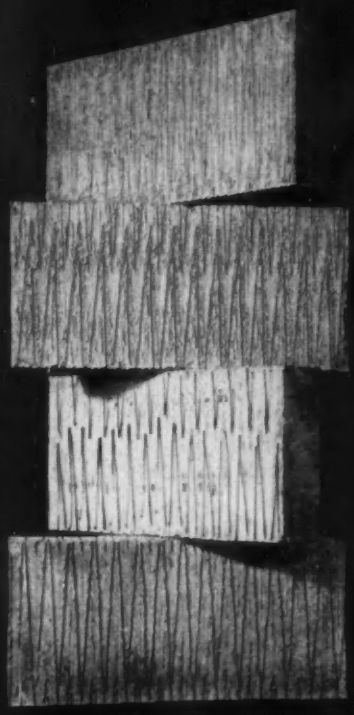

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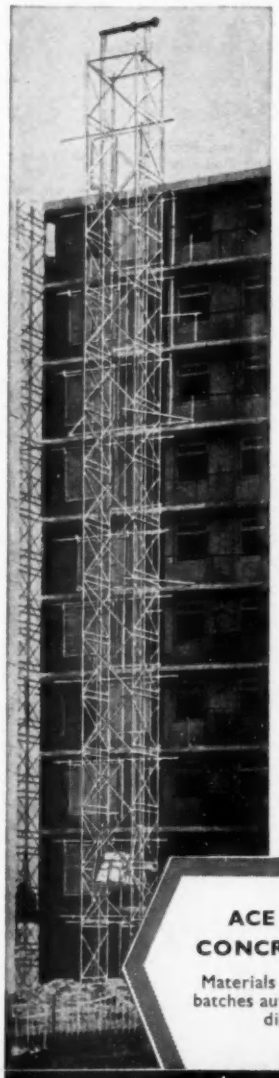

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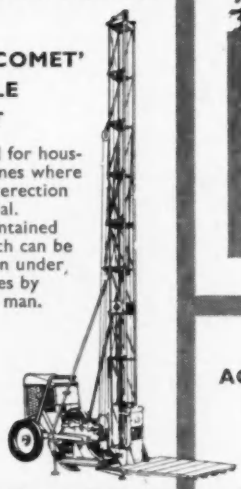

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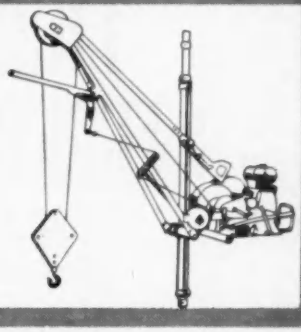

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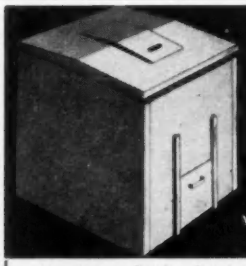

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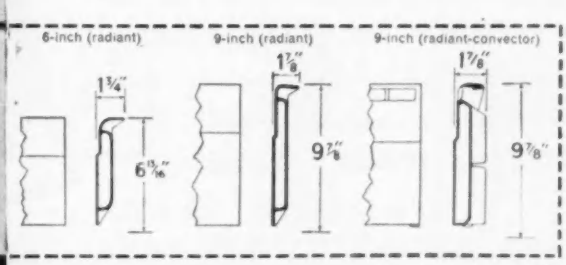

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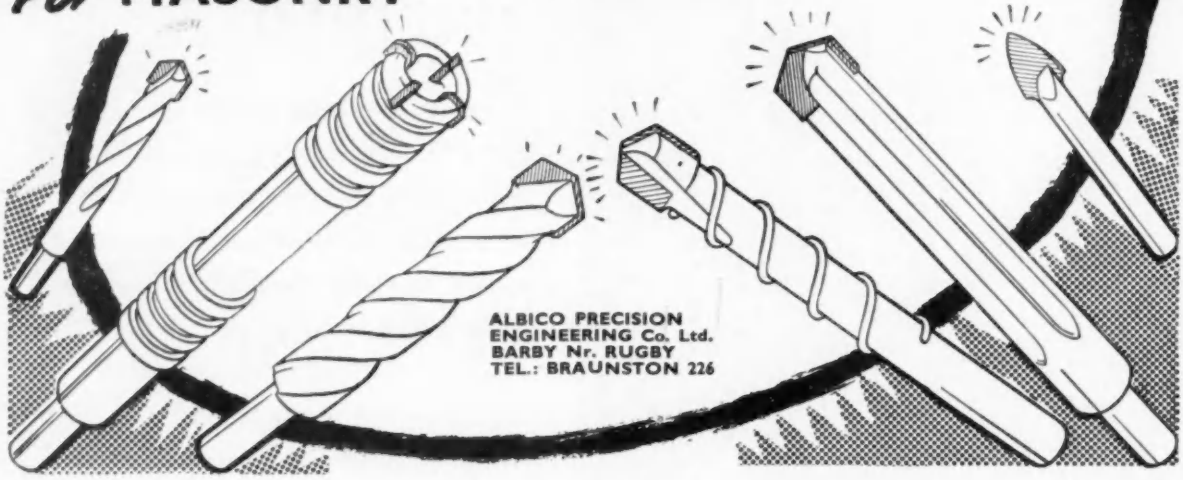

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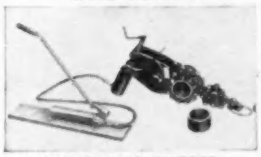

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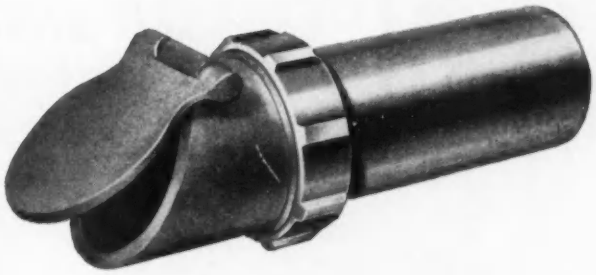

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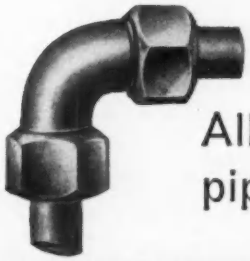

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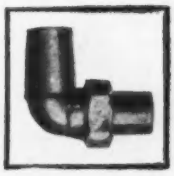

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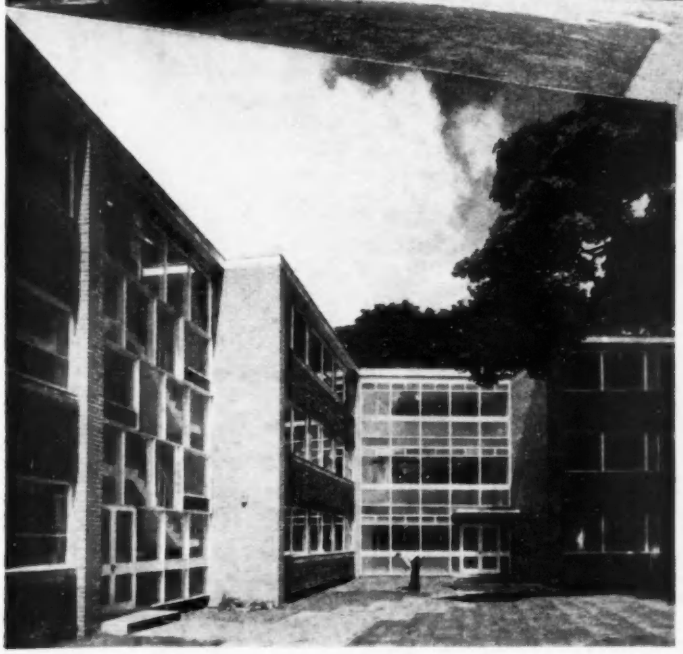

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News Summary

283 The site of the former Queen's Hall in Langham-place is to be redeveloped with shops, offices and a first-class hotel.

286 Sir Thomas Bennett, in a letter to the Secretary RICS, has expressed some forthright views on the alleged waste of effort inherent in the architectural competitions system.

287 The Minister of Housing and Local Government is to hold a limited architectural competition for the design of the new Choir School near St. Paul's.

294 The relationship of the Association of Official Architects with NALGO is discussed in correspondence between a member of the Association's Council and the Chairman, Mr. T. M. Williams.

300 Some solutions for the London traffic problem are advanced by Mr. Donovan H. Lee.

303 The RICS is to raise the minimum standard of entry to its professional examinations with effect from October 1 next year.

303 Local authorities in the London region are considering reopening negotiations with the RIBA on the scale of fees for State-aided housing.

304 The full list is given of the Civic Trust's Design Awards for 1960, when the competition was open to County Boroughs.

308 The National Federation of Plastering Contractors is to collaborate with the BRS on research into the mechanisation of plastering.

'Late News' will be found overleaf, and 'News of the Week' on page 297.

Late News

Civic Centre Competition, Lincoln

THE RESULT of the architectural competition for a new Civic Centre at Lincoln will be announced at a meeting of the City Council at 7 p.m. on August 29. An exhibition of all the designs submitted is to be held in the Usher Art Gallery, Lincoln, for a minimum of six days from August 29.

Building and the Economic Situation

THE PRACTICAL EFFECTS of the Government's economic policy on the construction industries is becoming clearer as some schemes are postponed and others are allowed to go ahead. On Tuesday evening Hemel Hempstead Borough Council agreed unanimously to proceed with the building of a £266,000 town centre pavilion for dancing, dining and receptions. The decision was taken in the face of what was described as 'a dismal report on the financial implications' of the scheme.

Also on Tuesday, the Ministry of Transport announced the commencement of preliminary work on the new 1¼-mile overhead road running westwards from the Chiswick flyover along the Great West Road. The whole scheme will take three years to complete and traffic will have to be greatly reduced during construction if serious congestion is to be avoided.

Less happy news came from the Middlesex County Council, which has suspended house purchase loans because of the country's financial situation. The suspension operates at least until the next meeting of the Council, on October 25.

Another pointer on Tuesday to the way that budget restrictions may affect construction work came from Carlisle, where it was announced that one of Britain's biggest railway projects—a £5m. marshalling yard which is two-thirds finished—is to be shelved. British Railways were unable to say when work would start again, but it was stated that the original completion date was 1962 and that this is still the target date.

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Leading Article

Architectural Education and the AA

IT SEEMS UNLIKELY that there has ever been a time when more was being said and written about architectural education. Aims, and methods of achieving them, are both under critical re-appraisal. It is therefore to be expected that the Architectural Association, with MR. EDWARD CARTER, its new director just installed, and MR. W. A. ALLEN, its new principal arriving from the Building Research Station next month, should be making an examination of the type of training it is going to give and having a look at the future of the establishment generally. Under the chairmanship of PETER CHAMBERLIN, a working party has been entrusted with this work and a synopsis of its report (reproduced on page 299) has just been issued.

Under these changing conditions it can hardly be expected that some clear and perfectly defined course of action will emerge. If the synopsis is a reliable guide, the report will not shake the earth, but the arguments are well reasoned and lucidly presented. However, we are frankly disappointed that it does not carry us as far forward as we believe it might have done.

The authors have perforce to examine in broad terms what the future architect is likely to have to do. This difficult speculation is admirably covered in some half dozen excerpts of which the following is typical: 'The translation of needs . . . to completion of the building contract.' There is a liberal sprinkling of phrases such as 'capacity to exercise judgment,' 'complete man,' 'Technique can be taught, art can only be learnt,' indicative of a situation where the appropriate course at present is an endeavour to fit a student for a general understanding of anything that may arise rather than a detailed knowledge of some facets. We appreciate the difficulties, but a working party, as opposed to a committee, might surely have taken this further and examined more specifically the precise situations that a young architect normally has to face in the course of his daily work? The generalisations, after all, have been quite recently most admirably covered by SIR LESLIE MARTIN and PROF. LLEWELYN DAVIES. It is this further stage which seems to be needed to translate vague aspirations into the framework of a new syllabus.

In trying to formulate its ideas and carry them out the AA has a solid advantage over other schools in having closely gathered around it in London, the body of progressive architects which constitute the Association's membership. The working party points out the financial difficulties inhibiting the development of a wider education but puts forward no suggestion as to how the abounding good will of the membership might be more fully exploited.

The AA, we are reminded, is unique in being an independent institution, but we feel bound to query the value of this position unless it is used to make progress in ways not possible under normal ministerial or university restraints. The AA has always put great value on this freedom and its refusal to join the LCC National School was another manifestation of it.

Although the AA did not take the plunge and join with

other branches of training for building under the aegis of the LCC, it is at least heartening to read that it still pays lip service to the idea behind such a school. But again there is no practical follow up, except an allusion to co-operation with 'appropriate institutions.' This is a major disappointment. If not at the AA, somewhere else, the integration of the training of builders' architects and engineers must start. Is this not a field where that freedom might be exercised?

The matters so far mentioned are concerned with the improvement of the normal courses leading to graduation, but the report also very wisely stresses the need for post-graduate courses. To cater for such activities on the scale needed obviously means more money than the AA can find from fees. It will not be easy to find it elsewhere but to make it possible the AA will have to demonstrate the compelling necessity and the imaginative quality of its proposals. Urban Design, Landscape Architecture, Building Engineering Services—the subjects mentioned—are all crying out for attention. A few years ago the Yerbury Foundation was established to act as a channel through which funds could be raised for purposes such as these. It is not mentioned in the synopsis, but it is an instrument ready to hand to be pressed into service. Why not harness it?

The working party has had its rather gentlemanly say: it remains to be seen what MR. ALLEN and MR. CARTER will make of its recommendations. We wish them well in their task of training architects with the right balance of technology and the artistry which the synopsis stresses and defines as '. . . the ability to design buildings which transcend their purely functional purpose and thus lift the solution on to a plane higher than the merely competent—difficult though even this latter may be to achieve.'

Notes of the Week

Competitions a Disability to Architects? ; Theme and Variations ; Stage Design Since 1945 ; Two BBE Study Groups

MANY ARCHITECTS will share the views expressed by Sir Thomas Bennett (in a letter addressed to the RIBA and reprinted on page 286) on the time, effort and money wastefully expended by architects who unsuccessfully take part in architectural open competitions, and also on the submission of designs accompanied by builders' tenders for local authority redevelopment projects. The arguments advanced are not new, but they do not lose in validity thereby or weaken his final submission that 'it is time that competitions only should be approved in which the contestants are selected and everyone is paid a substantial fee. Such selection' adds Sir Thomas, 'could well embrace young men as well as experienced offices, but such a process would substantially increase the standing of the members of the profession in the eyes of the public and, in my view, would be a substantial step towards the appreciation of architects in this and other countries.'

* * *

THERE WILL BE OTHER ARCHITECTS who would not go all the way with the view expressed. The point at which they would probably part company with Sir Thomas would be that at which selection of names to take part in limited competitions is made. Selection could well embrace 'young men as well as experienced offices'—but would it? A quick look at the result of recently-decided competitions shows that most of these have been won by young men who, by no possible stretch of imagination, would have been invited to compete, for the reason that they were previously quite unknown in their profession. The late Sir Giles Scott and, to take a more recent example Mr. R. H. Uren—the one a young man of 21, the other fresh from New Zealand—were set off on their professional careers by winning competitions for Liverpool Cathedral and for Hornsey Town Hall, respectively, yet might have waited many years before being invited to take part in an architectural competition.

None of these arguments, however, touches the real root of the matter, which many hold to be that the discipline of thorough investigation of an architectural problem as presented in a competition is part of the architect's educational process. As such it has a value of its own, and additionally can give a 'lift' to an office possibly jaded by routine work.

* * *

CLEARLY, THERE ARE ARGUMENTS on both sides of this particular matter. Equally so, on the subject of schemes accompanied by prices jointly submitted by architects and builders for redevelopment schemes, a subject to which Sir Thomas briefly alludes but does not develop. Is his analogy of the medical and accounting professions a precise one? In one case we are dealing with a sick man, in the other with a possibly unsound company; in neither case can there be numbers of experts interposing their views. The case of a development scheme is rather different; no question of privacy is involved and the problem is one which is capable of any number of solutions, both aesthetic and financial. Moreover, such projects are prepared by development companies who in most cases pay the architect a fee for his work—though not always; perhaps it is this that prompts Sir Thomas to express the view that such cases do the profession harm in the eyes of the public.

Enough has been said to show that Sir Thomas Bennett has raised a question which is highly debatable and one which the proper committee of the RIBA will no doubt wish to consider.

Theme and Variations

SINCE THE ANNOUNCEMENT that the Court of Common Council had, at its meeting on July 27, given approval of drawings for the development of the northern precincts of St. Paul's Cathedral there has been much speculation as to which variation of the original scheme had in fact been approved. The absence of an official statement from architects, developers or builders has caused some to suppose that the approved development was that in which both the LCC and the Royal Fine Art Commission did not entirely acquiesce. Sharp criticism has been made against, for example, the massing of the tall block shown to the right of St. Paul's on the latest model seen by the public, which, it is thought, would ruin the silhouette of the cathedral.

We understand that the latest model and plans made available for public perusal are not those of the final scheme as it will be built. It appears that although approval has been given certain amendments are to be made which will result in the precinct being substantially replanned. The architects responsible for the final plans, Messrs. Trehearne and Norman, Preston and Partners, are in the process of carrying out these revisions which, according to a reliable source, will be made public in four to five weeks. Whether the deplorable architectural character complained of is to be improved or whether the damaging tall block is to be altered in shape and height is a matter for conjecture. What is certain is that the critics have been made to dance to many tunes, the final variation of which is as much an enigma as our present system of planning control.

Stage Design Since 1945

HEARTILY recommended for all fellow-escapists, and particularly architect ones, is the exhibition 'Stage Design in Great Britain Since 1945' at the Arts Council, St. James's-square (until August 25), writes BASIL MARRIOTT.

Apart from resolving inhibitions (to use a dated phrase, now probably 'digging blockages') latent in most of us, the frank fantasy, charm and even chi-chi of the best stage design of the period covered fulfils what has become a real, and healthy, need for those who are concerned with industrialised architecture for their bread and butter. As the ephemera of the arts, stage design is pre-

eminently that of architecture, as architects from Inigo Jones to Palladio (whose fixed scenery at the *Teatro Olympico* at Vicenza is vividly recalled by one of Piper's contributions) have proved. Personally, I feel that it should be as escapist and out-of-this-world as possible, viewed always from the other (or worldly) side of the proscenium so well synthesised by the peepshow model of which there are several enchanting examples on view.

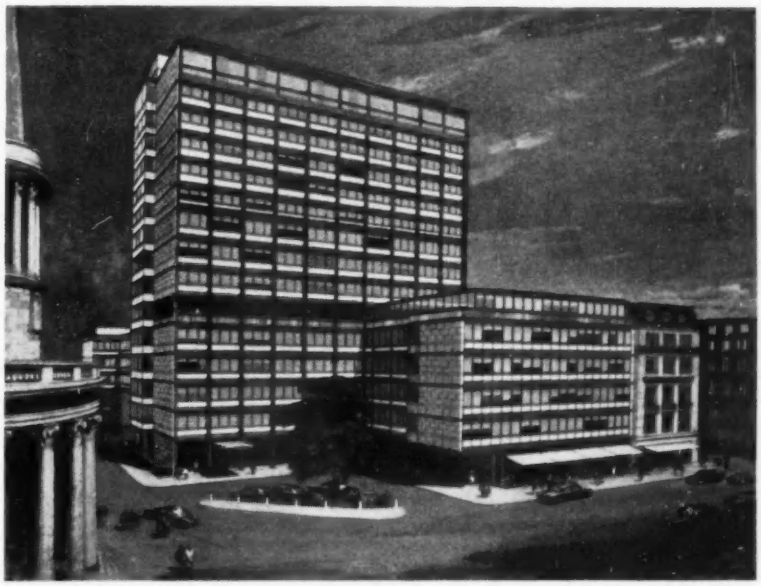
Not least of the interest is the way in which artists and designers better known in other fields have adapted themselves to the technique. Examples of the former are Michael Ayrton, Edward Burra, Felix Kelly, Sidney Nolan, Osbert Lancaster, John Piper and Ronald Searle, though, notably, most have claims as designers in their own right. Even more intriguing are the visual essays of choreographers, and even dancers, associated with ballet, like William Chappell and Andrée Howard. But still leading, if in certain defined fields, are those particularly British institutions Cecil Beaton and Oliver Messell. Once perhaps regarded a little askance by functionalist-purists while the label 'orchidaceous youth' was still currency, time and popular acclaim have endorsed their very real place in the scheme of things—nor must one forget our own generation's Pageant Master Royal, Hugh Casson, about whose inventions there is always a welcome whiff of hereditary greasepaint.

I would particularly call attention to the works representing Leslie Hurry and Loudon Sainthill as art, or at least decorations, in their own right, but for my money (or rather that of a lucky colleague) Peter Rice's costume design 'Truffaldino' tops the bill.

Two BBE Study Groups

THE APPOINTMENT (noted last week in Late News) of two groups to study the subjects of site management and of graduate entry into building marks what a statement issued by the Institute of Builders (and reproduced on page 303) describes as the end of 18 months enforced hibernation of the Board of Building Education caused by the implementation of the Institute's new scheme of professional membership examinations. Those who think that these important subjects might well have been put under review long ago, should understand that the Board is staffed by the Institute which has had its hands very full with the mass of work entailed in devising and putting into operation the examination and educational policy of the Institute—work in which some of the members now appointed to the study groups have been deeply involved as well.

Both subjects selected for study are important; and both have been debated fairly thoroughly over the past few years. The groups should therefore have a good deal of information at their disposal which should assist them in making recommendations for action which the terms of reference envisage. The membership of the two groups is strong and comprehensive, and their reports should not, it will be hoped, be overlong in their appearance.



Perspective of new building incorporating shops, offices and a hotel which is to be erected on the site of the former Queen's Hall, Langham-place, W1. The architects are Sir John Burnet, Tait, Wilson and Partners

The Queen's Hall Site

Redevelopment Proposals

FOLLOWING the completion of negotiations with the Crown Estate Commissioners, Laing Development Co. Ltd., in association with the Pearl Assurance Co. Ltd., are to redevelop the site of the former Queen's Hall and St. George's Hall, Langham-place, by the erection of a substantial building incorporating shops, showrooms, offices and a first-class hotel. The architects are Sir John Burnet, Tait, Wilson and Partners, and the development has been approved by the Royal Fine Art Commission. Work on the 31,000 sq. ft. site is to commence shortly and construction, which will be carried out by John Laing Construction Ltd., should be completed early in 1963.

The proposed building will be a reinforced concrete structure faced with Portland stone, natural stone and ceramic mosaics. It will comprise four main elements: a 155 ft. high tower block of 15 storeys set back 70 ft. from Langham-place; a connected six-storey block, 80 ft. long, which will maintain the line of existing façades in Langham-place and Regent-street; a second six-storey block in the rear, at the junction of Riding House-street and Great Portland-street; a three-storey bridge block at second floor level, facing Riding House-street and linking the rear and tower blocks.

Part of the ground and first floors will be occupied as shops and showrooms with an area of over 10,000 sq. ft., together with separate office entrance lobbies and hotel reception space. The remainder of the ground and first floors and the second to eighth floors will comprise about 64,000 sq. ft. of office accommodation served by four lifts. The ninth to the fourteenth floors will be occupied as an hotel which will be entirely self-contained, with its own central heating and service facilities, including express passenger and service lifts.

A basement car park for 66 cars will be provided with access via double ramps off Riding House-street, together with 14 additional car spaces at ground level. Other accommodation in the basement will include a loading bay, stores and central heating plant serving the shops, showrooms and offices.

The quantity surveyors are Wakeman, Trower and Partners, and the sole letting agents, Ernest Owers and Williams.

Poet's Corner

I cannot concentrate today;
Why do my thoughts all go astray?
Terms technical my wits bewitch—
Roofs are no good without a pitch;
Willow's the only wood of class;
Green screeds evoke the green of grass;
Foot-runs are visibly enthralling,
But how I deprecate stonewalling?
It seems that every brick's a bat
And all gates wickets, which I pat,
Seeing that every lock and latch
Is neatly furnished with a catch.
Most geometric forms are wanting;
Why is the Oval so enchanting?
Something's wrong when work's a bore.
(I wonder what's the latest score?)
It's really time I had a rest—
I think I'll go and see the Test!

ANON.

Turnstiles in Public Conveniences

MR. HENRY BROOKE, the Minister of Housing and Local Government, has sent a questionnaire to local authorities regarding turnstiles in public conveniences. He plans to make a statement on these later in the year, and has asked that no more should be installed in the meantime.

Sussex University College—Model

BASIL SPENCE & PARTNERS, architects
OVE ARUP & PARTNERS, structural engineers
REYNOLDS & YOUNG, quantity surveyors

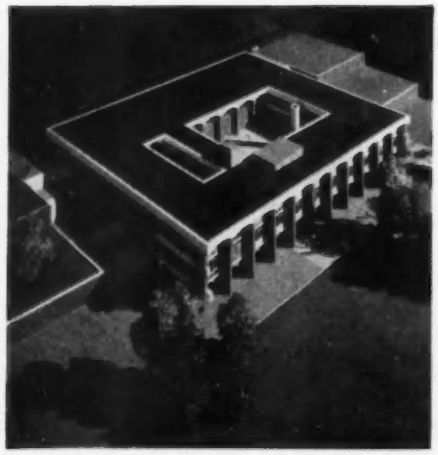
THE DESIGN for Sussex University (first reviewed in 'The Builder' of April 1, 1960) has advanced from sketch to model stage, making the sculptural character of the work more evident. The site layout has been amended slightly to bring more space and emphasis to the campus area.

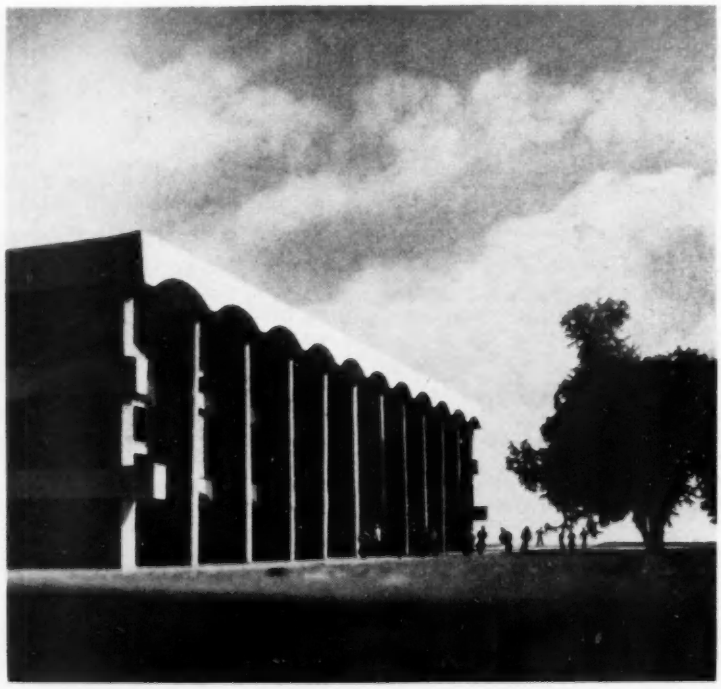
College House is the focus of the social activities of the University and is conceived as a gatehouse quadrangle. The entrance is through an archway 38 ft. high. On three sides the quadrangle rides on colonnades which are cut off from the pavement by a 15-foot moat. Rainwater spouts down into this from concrete gargoyles and light is reflected up from it to the shallow vaults above. The courtyard itself is hard and urban in character.

The vaults are prefabricated in three sizes, 10 feet, 15 feet and 20 feet spans supported simply on solid brick piers and walls. The brickwork is fairfaced inside and out. Non-structural internal walls are to be of natural wood. Light fixtures will be in the springing of the vaults so that the lights can be looped by flex to any position in the vault.

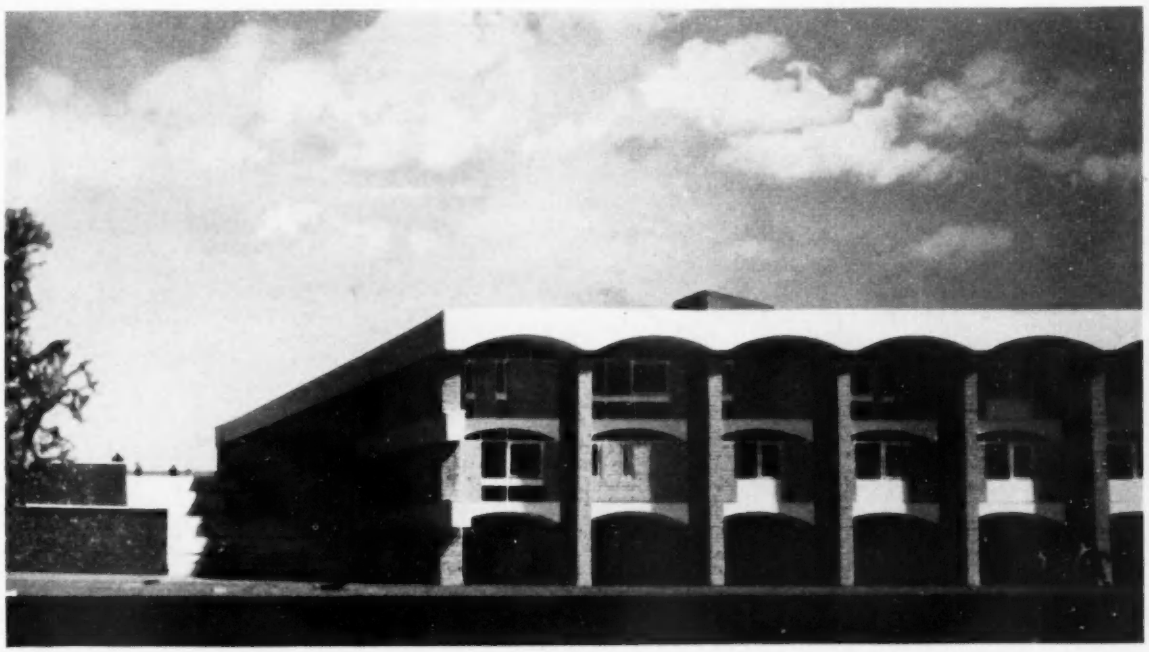
The University will be built in stages during the next 10 to 15 years, and it is to help establish unity during this period of growth that a strong sculptural theme was evolved.

Above, site model. Left foreground, College House; (reading clockwise) open air theatre and library; arts building; engineering; chemistry; physics (facing pyramid chapel); administration & great hall

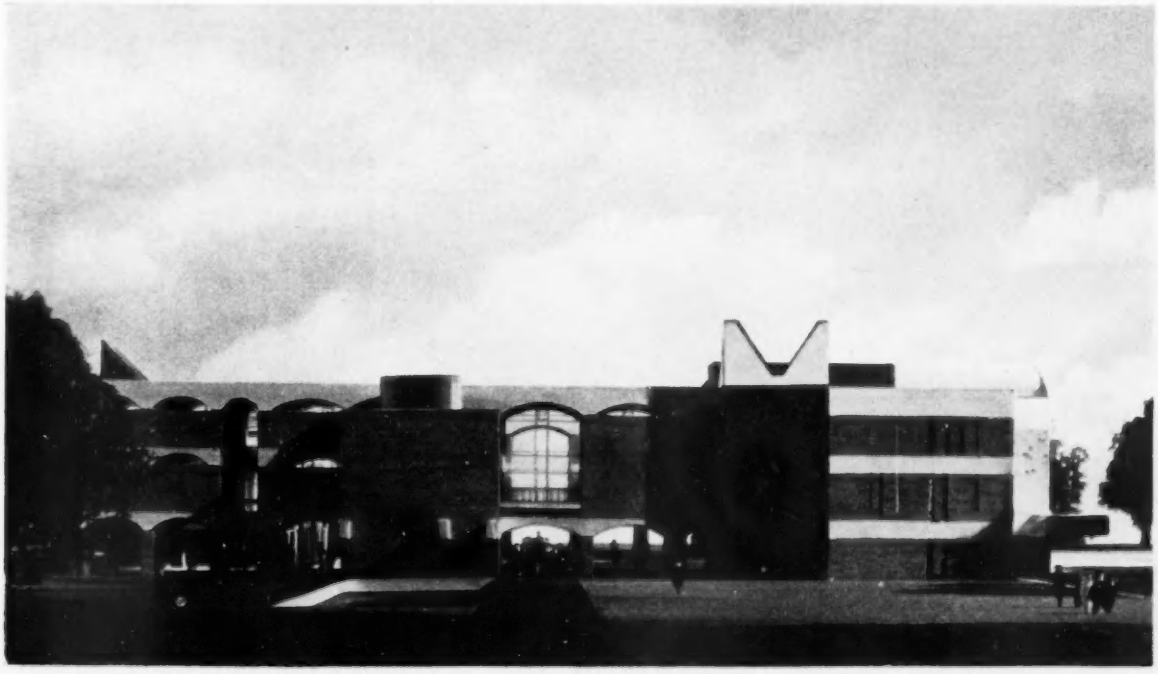




Above and right, the physics building, again planned round an internal court, with elevations and setting reminiscent of classical Greek simplicity



Above, physics building from the campus. The ground floor is in the main left open to provide covered space for students to congregate. Below, College House, elevation to the main campus



Letters to the Editor

Westminster Housing Competition ; 'New Architecture in Transport' Exhibition ; RICS Annual Conference

SIR,—I have very strong views about the large amount of effort on the part of architects which goes into competitions, and, in recent years, into schemes associated with tenders asked for by local authorities. These, and other indirect ways of getting architects to work for nothing, have in my opinion become an increasing disability to the profession and, I am quite sure, does it very serious harm in the eyes of the public.

I have therefore addressed a letter, a copy of which I append, to the secretary of the RIBA, Mr. Gordon Ricketts, and believe there may be some considerable advantage if you would publish it.

THOMAS BENNETT [KBE, FRIBA],
T. P. Bennett & Son,
43 Bloomsbury-square, WC1.

Copy

DEAR RICKETTS,—The recent Westminster City Council competition has again forced on my attention the serious economic aspect of competitions as I see them. The scheme is said to be estimated to cost £2,000,000, and possibly on the new RIBA Scale this would constitute a fee of £68,700.

There were 68 competitors, and on the assumption that each scheme should have attracted a fee of ½ of 1 per cent., this would be a total fee of £100,000. If each scheme cost the architects who submitted it £1,000, the profession has contributed to this competition £68,000, which is equal to the gross fee the successful architect would receive.

Nobody would expect to find 68 firms of accountants who would examine the financial structure of a company and send in a seriously considered solution to its problems in the possibility that one man would be appointed accountant to the company and two other people would receive a small premium. Nobody would present the medical profession details of a difficult diagnosis and expect to find that 68 leading doctors would send in their opinions free of charge in the possibility that one man would be able to carry out the operation, two others would receive a small sum of money and the remainder would be unremunerated. Each of these professions would be horrified at the waste of time to which leading and other members would be put in studying a substantial problem and not during that period doing any constructive work which was of future value.

I am quite sure that the holding of competitions in which large numbers of architects compete and receive no remuneration whatever for the serious work involved in studying the problem and finding a solution, is economically unsound and psychologically is extremely damaging to the profession as a whole, as well as diverting a very large amount of energy from constructive work into unconstructive effort.

I think it is time that competitions should only be approved in which the contestants are selected and everyone is paid a substantial fee. Such selection could well embrace young men as well as experienced offices, but such a process would substantially increase the standing of the members of the profession in the eyes of the public and, in my view, is a substantial step towards the appreciation of architects in this and other countries.

Yours sincerely,
T. P. BENNETT.

'Sites are certainly getting scarce!'

'New Architecture in Transport' Exhibition

SIR,—Poor Mr. Marriott, he seems to have his own troubles over 'missed connections" ('The Builder,' July 28). With identical facilities offered, it seems strange that other correspondents were able to visit the Press view, obtain printed notes on the exhibition, obtain photographs, ask questions of the staff on duty and bring note books instead of tickets to write on.

It is stranger still that such stations as Harlow and Broxbourne, notably omitted from the comments, could be dismissed under the general phrase 'architectural clichés'; and that the distinguished contributions from the London Midland Region to station design illustrate a 'brake on ideas.' Perhaps the comments on the s.s. 'Caesarea' were meant to be complimentary? We would like to think so, and no doubt so would the CoID.

Regardless of any previous abortive essays in that field, the credit for the Taplow experiment should go to the young architects of the Western Region who, as a result of their concern over the state of existing stations, wished to provide remedies at minimum costs in suitable elements to be carried out in part or in whole as financial situations allow.

The 'Typographical clichés' presumably refer to the 1879 broadsheet or the pleasantly unpretentious grotesque No. 9 lettering used throughout the exhibition. Is this a serious suggestion, or was perhaps the whole article not meant to be taken seriously?

ROY L. MOORCROFT [ARIBA], Architect, Western Region, British Transport Commission.

A. B. KAUKAS [DIP ARCH, ARIBA], Principal Assistant Architect, Western Region, British Transport Commission, Melbury House, London, NW1.

MR. BASIL MARRIOTT comments: It seems my turn to commiserate with 'poor' Messrs. Moorcroft and Kaukas, who have themselves jumped some of the points. May I briefly continue the raillery they have adopted, and put them back on the lines at two of these at least. The remainder of their letter, though debatable, is perhaps best conceded to be fair comment on opinions expressed which surely come under this heading.

First, the *import* of what I write is emphatically to be taken seriously, and for professional and personal reasons I take this opportunity to scotch any suggestions to the contrary. Indeed, Messrs. Moorcroft and Kaukas, by their joint reaction, themselves answer their (possibly rhetorical) final question. If, however, I prefer to express myself less portentously than they approve, I ascribe this to hitherto unbroken confidence in the majority of fellow-architects' sense of proportion and I may add, of humour.

Second, the 'identical facilities' which the letter catalogues are not only normal at Press views, but also usually available, at least for a few subsequent hours, to those who prefer (or, as in my case, are obliged) to come later. Though tempted, I forbear to quote verbatim the results of my 'asking questions of the staff on duty' but mentioned in my article the conflicting answers received about the availability of printed information.

I would not have held BTC architects responsible for this had they not sought to revive it, and refer to it only (if this should be in their minds) to reject any idea that my impressions of their own competence were coloured by a minor organisational slip-up. Indeed, Sir, though they seem to call for a reply to their questions, it is difficult to know what Messrs. Moorcroft and Kaukas now expect of me: but if their wish is by any chance a recantation, I stand pat by what I thought, and still think, a fair assessment. Since they seem, from the second paragraph, a little sceptical about compliments, may I add that to concede a very near miss, and characterise the exhibition as a respectable showing, was not meant nor, I believe, generally regarded as unduly uncomplimentary in the circumstances.

RICS Annual Conference

SIR,—The summaries of deliberations of the discussion groups at the RICS annual conference (reported in 'The Builder' of August 4), not only are interesting but show that the Royal Institution is well alive to its responsibilities; much of the matter in this part of the Report as published will be found unconstructive by few.

I write not in the role of a critic but in friendly observation to comment upon what I believe is a service seemingly either considered of minor interest or not possibly fitting into the future plans of the Institution—I refer to the complex construction site surveys which give the architect-planner the full dimensional data he needs to provide proper early directives to all who co-operate with him on a project.

In the Report, Group A, is seen the expression '*The world needs a profession learned in the use and development of land*,' and no one will deny this. One wonders does this mean only going so far along the road, or does it mean as

well the development of land as applied to construction and civil engineering projects? If the latter be the case, then the last part of the previous paragraph might well be looked at. Some incline to the view that the building surveyor can perform such tasks, and in some instances this is not denied. Nevertheless, those with experince of the current needs of the planner, the QS, the engineer and those who build will be aware of the background of surveying experience as well as construction knowledge that is required of the surveyor. One cannot ignore the wide technical ability a man should possess.

A further undeniable fact mentioned in the report is that the RICS is the most senior body in the surveying profession, yet in putting the point the Group surely does not suggest that there are not equally efficient surveyors who are attached to other institutions or bodies? The point made in the report would be fully acceptable where the RICS covers *all* of the ramifications of the surveying fraternity, and that is why these matters are brought out into the open. It is suggested, for example, that since the coming of the prefabrication era something like 60 years ago, the RICS has found little interest in the study of constructive aid through surveying and instrument usage not only as applied to the provision of precise dimensional forms of construction surveys for planners but to the related assistance that these can bring to those who take-off quantities or build on sites. Possibly this has been because the Institution has thought the matter to be purely one for the industry, and it may in the past have been right.

Today, when architect-planners necessarily must at a very early point have precise and comprehensive data before they even can arrive at the factual size of structures on projects, a field in surveying techniques appears which, if only in complicated site instances, will require an expert surveyor as well as a master mathematician.

With developments in instrument usage, and in particular the modern types of all kinds, the RICS as the senior body might well give thought to offering guidance in the future to the industry. Today construction is reaching to the sky, and whilst one accepts that, in the survey of some sites where rectangular tower-forms stand freely distant from boundaries, little dimensional information may be necessary, the means whereby the industry can guide vertical building to the newer heights—and ensure verticality—surely offers an opportunity for the RICS surveyors to probe, investigate and advise upon. For too long these important guidances have been left to the individual with perhaps limited experience.

The interest of the RICS in boys who do not reach grammar school level is a fine step forward, yet one hopes that, at the end of their training, they may lose the label '*these entrants could very easily have certain professional work delegated to them*'; half-a-carrot held out to any rising young man would seem perhaps rather unkind because many of the great men of the past have risen from a poor start. The 'ideal' might be a preferable encouragement.

Group H rightly looks to landing on the moon, and notes the scope this could offer surveyors; but it could be useful to recognise that there is a great deal to be done by all professional men on this planet, not only to help one another but to see that this vast building industry which is ours gets all the help in the advancing prefabrication era that it needs.

GORDON TOMALIN [FGS, MI STRUCT E],
1 Gower-street, WC1.

Competition News

New Choir School for St. Paul's

MR. HENRY BROOKE, the Minister of Housing and Local Government, has en considering at the request of the Dean and Chapter of St. Paul's Cathedral, how the differences of opinion between the LCC, the City Corporation and the Royal Fine Art Commission on the design of the new choir school can be resolved and the Dean and Chapter advised on the best design for this building.

After a meeting with the bodies concerned the Minister has concluded that there should be a limited competition for the design of the new choir school, a course which is acceptable to the Dean and Chapter, the local authorities and the commission.

The President of the Royal Institute of British Architects, Sir William Holford, is advising on the arrangements.

Netherlands Embassy, Washington

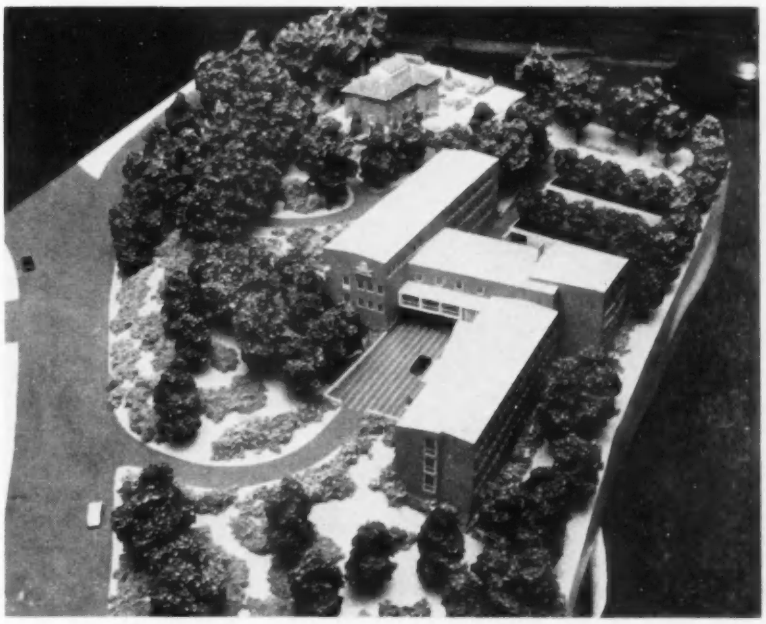
THE NETHERLANDS EMBASSY in Washington, DC, has under construction a $2m. Chancellery Building at 4200 Linnean Avenue, NW, in Washington. The Chancellery, to contain approximately 70,000 sq. ft. of floor space, plus parking space for 85 cars, will be four storeys high. Included in its facilities will be a cafeteria and an auditorium with seating for 200.

The proposed building was designed by Peter Tauber of Alkmaar, Holland, who won a competition held in the Netherlands. The local plans are being developed by Deigert and Yerkes, AIA, of Washington. The builder will be the William Phips Comb Company, Inc., of Washington in conjunction with H. J. Nederherst Company of Gouda, Holland.

Much of the material to be used in the construction will be imported from Holland. This includes all exterior face brick, some marble steps, rubber floor coverings, native stone and new copper roofing material developed in Holland.

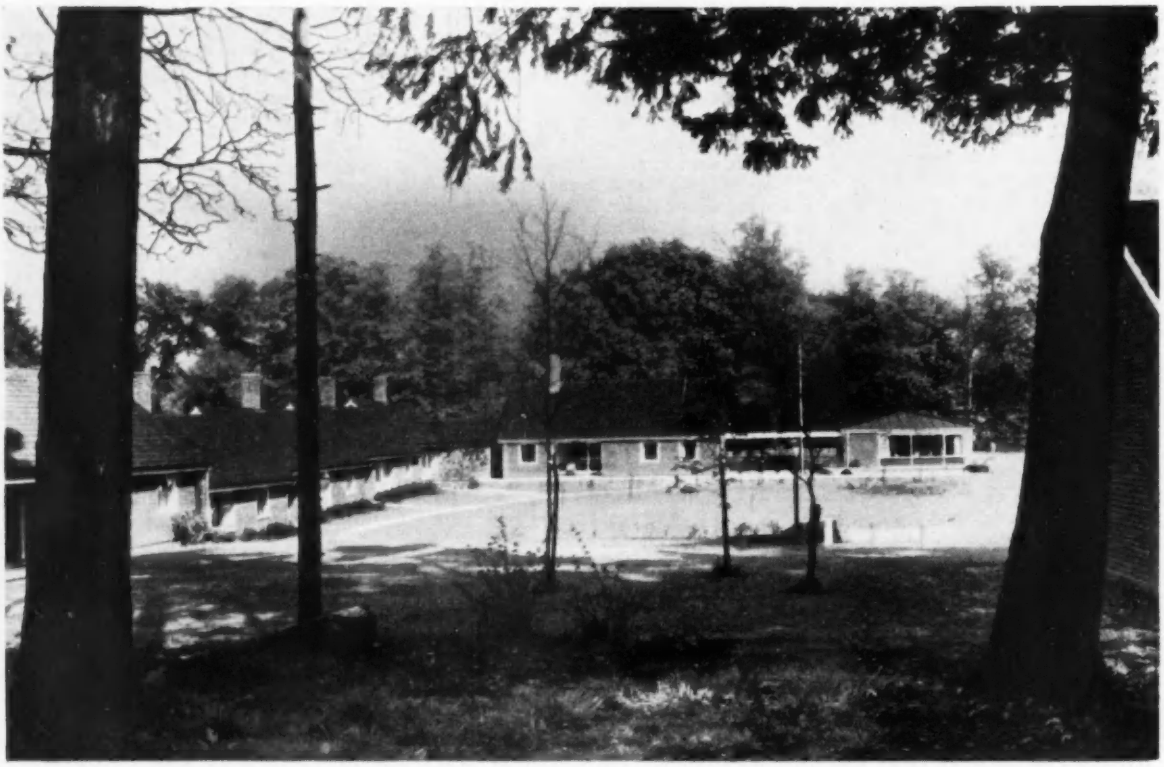
Another innovation to be imported from Holland will be the 'storm' windows. Of a new type, they will have the venetian blinds set in between the two panes of glass that are set in an ordinary wood sash. Construction is estimated to take about 12 months.

Model of the new Netherlands Embassy, Washington

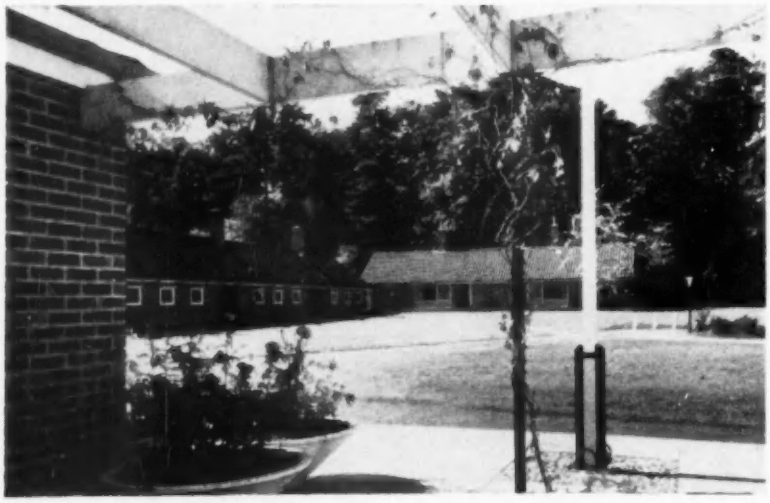


ABS Homes, Frenchlands Hatch, Surrey

CLIFFORD CULPIN, OBE, FRIBA, MTPI, architect
ANTHONY SARGEANT, ARIBA, associate in charge
CARLTON CONTRACTORS, LTD., general contractors

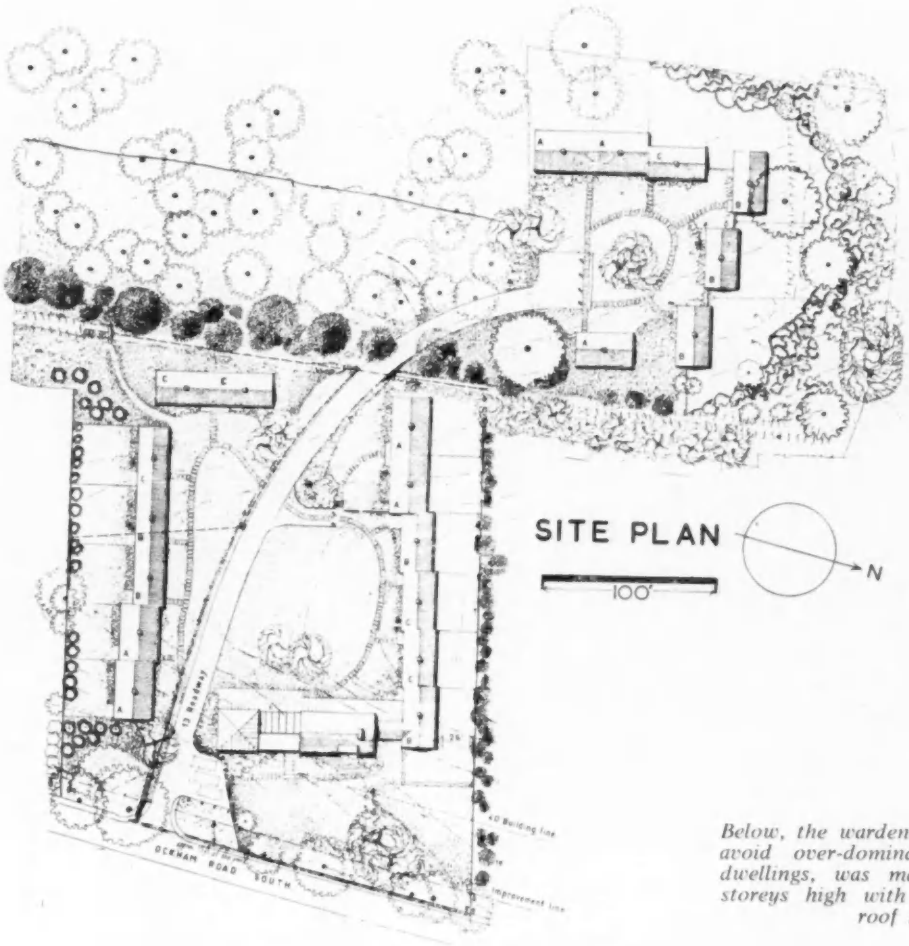


Above, the warden's house and meeting room, completed during stage 1 in 1958. Below, dwellings erected in stage 2, which now complete the enclosure of the green, south side



THESE OLD PEOPLE'S HOMES for the Architects' Benevolent Society were the subject of an open architectural competition held in 1956. Stage one, consisting of 6 dwellings and the warden's house and meeting room, were completed in 1958. Stage 2 has recently been finished, thereby completing the southern enclosure of the central green. The Southern Region Award for Rural Building was given for this scheme, in the 1961 good housing design competition held by the MoHLG and the RIBA.

The buildings were arranged with particular regard to the natural beauty of the site. The houses fit snugly into the contours and are backed by a belt of fine trees, a view of which is afforded by the large window of the social room. The dwellings are in two L-shaped blocks forming an open quadrangle with the warden's house and social room as the leg fronting the public road.



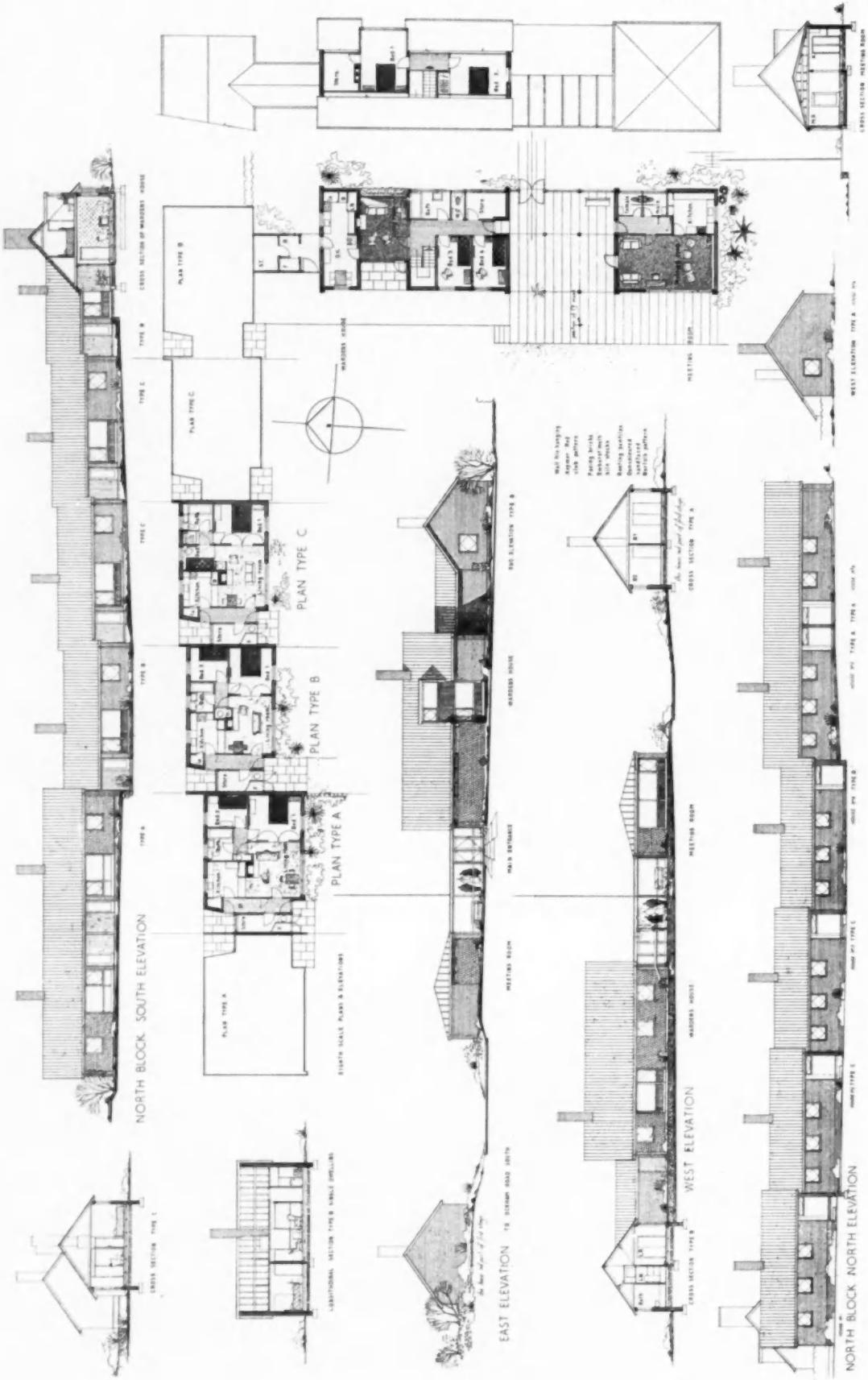
Below, the warden's house which, to avoid over-dominance of the low dwellings, was made one-and-a-half storeys high with bedrooms in the roof space

The key to the planning is the reversibility of each of the three dwelling types to suit orientation. Each house consists of an entrance unit and a living unit. The living unit remains in a constant orientation and the entrance unit reverses. The less interesting elevations of the later phase, expressing kitchens and bathrooms, will be relieved when recent planting has matured.

Quantity surveyors: Donald Harwin & Ptnrs., F/ARICS; landscape architects: Derek Lovejoy & Associates.

sub-contractors & suppliers:

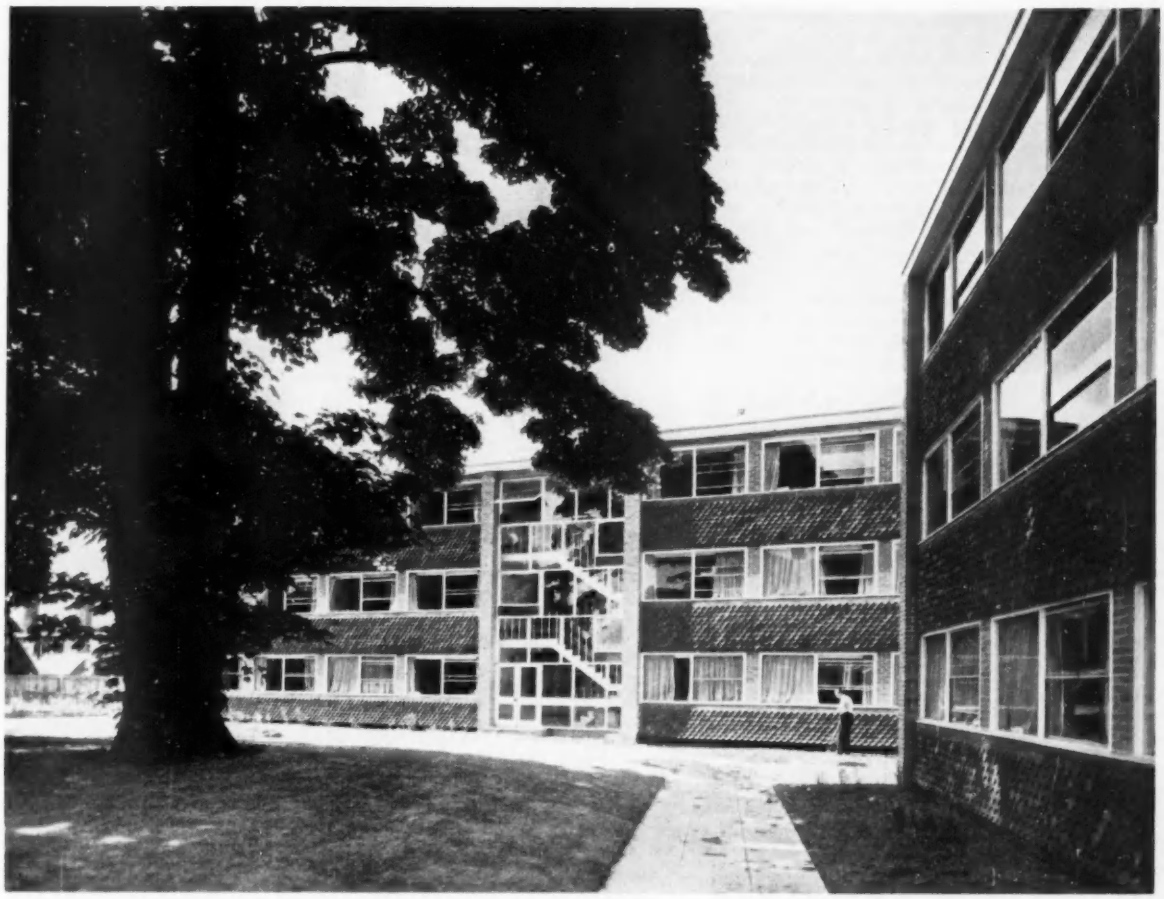
Facing bricks: Henry J. Greenham (1929) Ltd.; *electrical installation:* Electric Power Installation Co.; *kitchen fitments:* Jayanbee Joinery Ltd.; *cork tiles:* Hollis Bros. Ltd.; *ironmongery:* Childs Constantine & Co. Ltd.; *fireplaces:* Mosaic & Terrazzo Precast Co. (Staines) Ltd.; *sanitary fittings:* B. Finch & Co. Ltd.; *television installation:* Belling & Lee Ltd.; *curtains:* Heal's Contracts Ltd.; *landscaping:* Kingsway Nurseries; *Parkray fires:* Radiation Group Services Ltd., The Park Foundry (Belper) Ltd.



ABS Homes, Frenchlands Hatch, Surrey

Students' Hall of Residence, Birmingham

A. G. SHEPPARD FIDLER, MA, B ARCH, FRIBA, AMTPI, city architect
E. MASON, senior architect, schools section
JOHN BOWEN & SONS LTD., general contractors



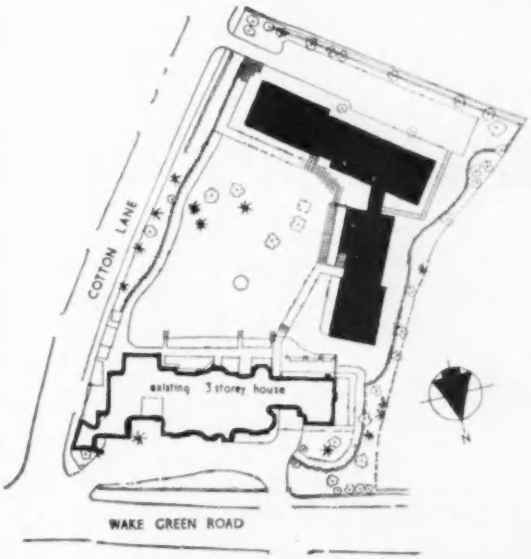
the hostel block from north

GRACIE HALL, Birmingham's new students' hall of residence, is situated in a good class residential district some 2½ miles south of the City centre. The site of 1.56 acres is rectangular and practically level. It was occupied by a large Victorian house which has been retained as the nucleus of the new scheme. It has been adapted to contain the warden's and staff quarters, common room, library, music and games room, dining room, kitchen, the heating installation for the entire scheme, and accommodation for the resident domestic staff. Linked with the house by covered way is a new building containing hostel accommodation for 99 students.

With the house, the new hostel block creates a court open to the south east and preserves most of the existing lawn and some fine trees. The hostel is L-shaped in plan, three storeys high, with a glazed corridor link of the same height at the re-entrant angle. It contains 63 single and 18 double study bedrooms, measuring 13 ft. x 10 ft. 6 in. and 15 ft. 6 in. x 17 ft. respectively, each with a ceiling height of 8 ft. 3 in.

The single units lie on either side of a central corridor, while the double units are planned across the free ends of the wings to give the required additional area without increasing the width of the building or interfering with the cross wall structure. Two bed recesses 8 ft. x 7 ft. are included in each double unit, each with a set back lavatory basin. The twin built-in wardrobes are placed at the back of the study area.

Access to each wing is from the court by way of a central staircase. Opposite these staircases, bathroom and pantry units are



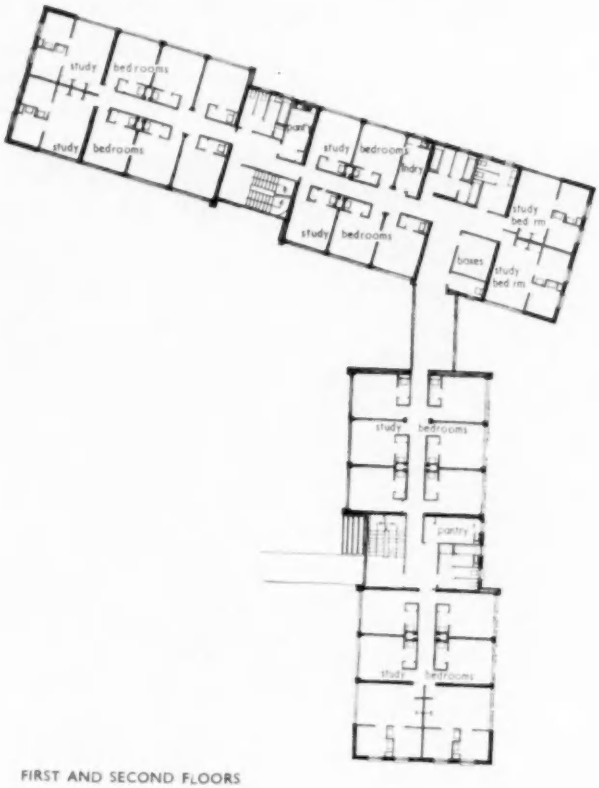
conveniently sited on each floor, while a larger service unit containing bathrooms, lavatory and laundry, faces the corridor junction at the angle of the building.

Construction is in load-bearing brickwork. The most interesting feature is the thinness of the load-bearing cross-walls. These are in calculated brickwork 4½ in. thick, reinforced every third course and braced by the structural walls of the ducts or by brick piers linked with the spine walls on either side of the central corridor. Floors are of 7 in. prestressed precast concrete beams toothed together over the cross walls to give full bearing over one half the effective width of each beam. The flat roofs are in proprietary timber decking units covered with two layers of asphalt on felt. Windows are aluminium sashes of full bay width, while the stallboards beneath them are tile hung on battens secured to 4-in. lightweight concrete blocks.

The whole scheme is heated by an oil-fired central pumped system with automatic boiler control, located in the house and serving low pressure hot water radiators. The ceiling of the covered way linking the house and the hostel is formed as a duct for the conveyance of services in lagged pipes.

The net cost of the scheme was £85,845 14s. 11d.; cost per place, £683 16s. 3d.; cost per foot super, £3 4s. 5d.

Assistant principal architect, schools section: H. O. Williams; quantity surveyors: Wood & Allsebrooke; heating, lighting and ventilation consultants: Donald Rudd & Partners; clerk of works: M. J. Durkan.



FIRST AND SECOND FLOORS

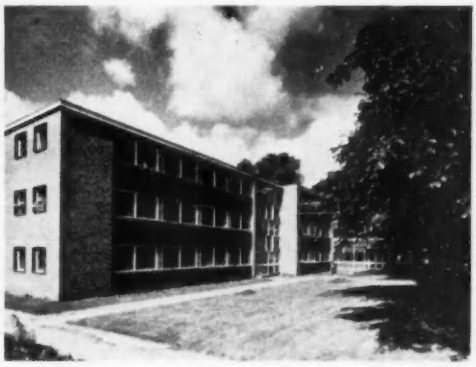
GROUND FLOOR, Scale: 1 in. = 40 ft.

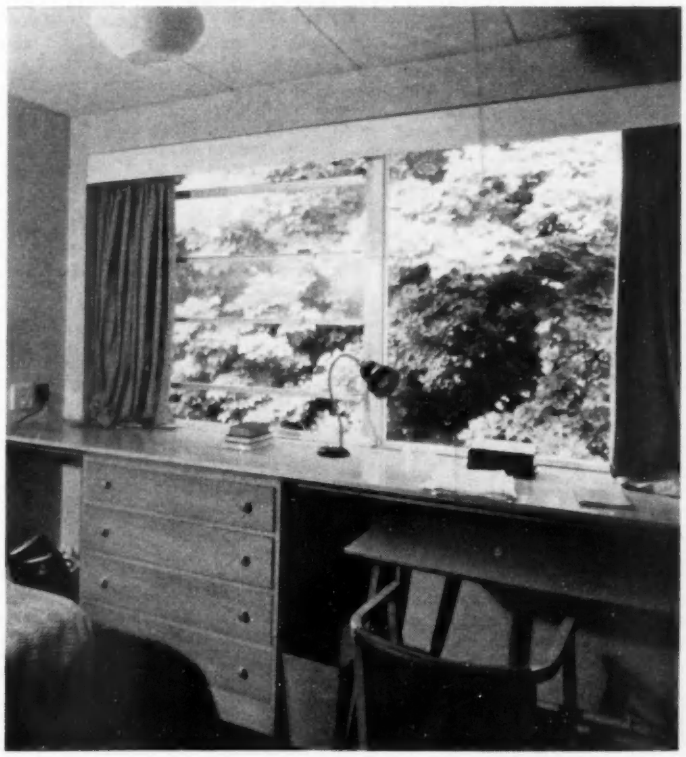
sub-contractors & suppliers:

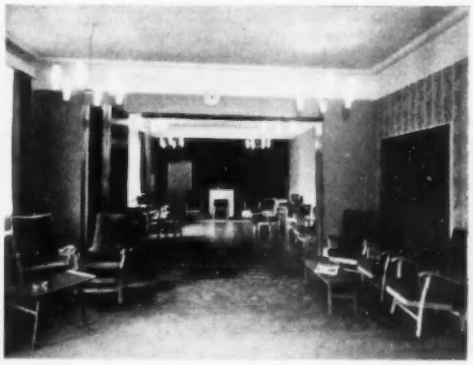
Electrical Installation: Etna Lighting and Heating; *flooring:* J. R. Brookes, Venetian Flooring Co. Ltd., Limmer & Trinidad Lake Asphalte Co. Ltd.; *gas installation:* J. Jackson & Co.; *glazing:* Boyce Glass Co.; *heating:* J. Jackson & Co.; *joinery:* Joinery Products Ltd.; *landscaping:* William Hartshorne & Sons Ltd.; *painting:* W. Juggins & Co. Ltd.; *plastering:* J. R. Brookes; *plumbing:* P. V. Wall & Sons Ltd.; *staircases:* Mountford Bros. Ltd.; *boilers:* The Ideal Boiler Co.; *bricks:* London Brick Company Ltd., Aldridge Brick Co., Blockley Brick Co.; *ceilings:* McNaulty Ltd.; *fire alarms and clocks:* Gents Ltd.; *decorative sheet:* Formica Ltd., 'Eternit' Ltd., 'Emaille'; *doors:* Joinery Products Ltd.; *door furniture:* N. F. Ramsay & Co. Ltd.; *furniture:* Matthews and Wilson (Joiners) Ltd.; *gates:* Joinery Products Ltd.; *screeds:* J. R. Brookes; *ironmongery:* N. F. Ramsay & Co. Ltd.; *light fittings:* G.E.C.; *notices:* Parr Advertising Ltd.; *paint:* Lewis Berger Ltd.; *partitions:* 'Licon' Blocks Co.; *paving brick:* Granwood Ltd., Tarmac Ltd., H. Bramwell Ltd., E. Webbs; *asphalt:* Val-de-Travers; *linoleum & cork tiles:* Armstrong Cork Co. Ltd.; *quarry tiles:* Messrs. Dennis Ruabon Ltd.; *roofing felt:* D. Anderson & Son Ltd.; *sanitary fittings:* A. D. Foulkes Ltd.; *scaffolding:* Scaffolding Great Britain; *York stone paving:* Hartshorne Ltd.; *floors:* Concrete (Midlands) Ltd.; *roofs:* H. Newsum, Sons & Co. Ltd.; *steel:* W. Chattaway Ltd.; *shutters:* Roller Shutters Ltd.; *group aerial:* Etna Lighting & Heating; *tiling:* Richards Tiles Ltd.; *timber impregnator:* 'Protimising' by Rudders and Paynes; *varnishes:* Lewis Berger Ltd.; *vertical tile hanging:* Maidenhead Brick & Tile Co. Ltd.; *infill panels:* 'Eternit'; *wallpapers:* Sandersons Ltd.; *w.c. cubicles:* Flexoplywood Industries Ltd.; *windows:* Aluminium Components Ltd.

Hall of Residence, Birmingham

Left, view towards the three-storey corridor link between the hostel wings. Below, view from east. Below centre, and bottom, common room and library in the converted house. Below left, typical student bedroom towards the window fitment. The desk unit and furniture were designed by the architect as specials







Association of Official Architects

Relationship with NALGO

The executive committee of the Association of Official Architects has, through its hon. secretary, Mr. G. J. Foxley, circulated for publication correspondence between Mr. G. B. Sneesby, who represents Devon and Cornwall on the Association's general council, and the Chairman, Mr. Thurston M. Williams. Following is the full text.

MR. SNEESBY'S LETTER

DEAR MR. WILLIAMS,—Please accept my apologies for having to leave the AGM early last Saturday (May 13) but this was my first meeting as Regional Representative (for Devon and Cornwall) and in my inexperience I had allowed insufficient time.

At the meeting I was considerably disturbed by the frequent reference, particularly by members of the Executive Committee, to the need to tread carefully and to avoid antagonising other interests, particularly NALGO. There is a very strong feeling in this office (County architect's department, Exeter) and in others against NALGO, the grounds, as far as I can ascertain them, being (1) that NALGO in its support of the APT scales, does not differentiate sufficiently between the necessary qualifications and responsibilities of an architect, and those of, for example, an administrative (clerical) officer; (2) that since NALGO does not recognise the special case of *professional* men in Local Government service, it does not negotiate on their behalf as a group; negotiations include them only as a very small minority.

It was apparent on Saturday that both the Executive Committee and the General Council are quite deeply divided in their attitude to NALGO and I feel that this issue should be resolved. I would very much have liked to have asked at the meeting if you could define precisely the relationship of AOA and NALGO; I did not do so because it seemed to me then that this whole question was much too fundamental and far-reaching to introduce into the discussions without prior notice.

If you consider it in order, I should be glad if you would place this letter before your Executive Committee.

OPEN LETTER TO A COUNCIL MEMBER FROM MR. THURSTON WILLIAMS

THE POINTS which you have raised in your letter of May 16 are of sufficient importance to answer in the form of an 'open' letter. There are, as you say, many areas and offices where mistrust of NALGO exists and where little or nothing is known of the way in which the existing negotiating machinery operates.

It should, therefore, be made clear from the outset that there are certain members of the Executive Committee of AOA who have had very considerable experience of Trade Union practice and procedure. This experience is by no means confined to NALGO but for obvious reasons NALGO is likely to be the more predominant Union. These members, all architects, working primarily and solely for the benefit of AOA must have your complete confidence, in that you are prepared to accept the information they give as being absolutely factual, and their advice in the best interests of the membership. With the above in mind, let us now examine the two points which you suggest are the main reasons why some architects in Local Government have pronounced anti-NALGO feelings.

The scheme of Conditions of Service drawn up and accepted by the National Joint Council covers the vast majority of employees in the Local Government Service. Architects are only one of the many professions involved and, in order to operate an 'umbrella' scale of salaries, it is hardly surprising that architects are not picked out for special reference. In actual fact the 'Purple Book' defines only the minimum salary scales appropriate to a qualified architect and leaves the grading of posts which carry duties of increasing responsibility to the discretion of the employing authority. Similarly, the discretion of the employing Authority is the only yardstick by which the respective salaries of an architect or a suitably qualified administrative (clerical) officer are determined.

Remedying an Anomaly

AOA seeks to remedy this anomaly by pressing for separate salary scales for Architects on a National basis. The prospect of future salary scales common to more than one profession must, however, be accepted.

Your second point is one which, although true, does not militate against an architect any more than against a member of another comparable profession. The charter grades can perhaps best be described as firstly defining a salary structure and then fitting all aspects of local government employment as appropriately as possible within it. To achieve a degree of parity and comparable salaries within the professions generally, NALGO has formerly operated a joint consultative committee. This committee provides the means whereby the various societies connected with professional staffs in local government are maintained in close consultation and contact with NALGO and enables discussions with individual Associations on the problems affecting their particular professions to take place. As far as architects are concerned, this advice has previously been sought direct from the RIBA through the medium of the Salaried and Official Architects Committee. Advice so obtained has proved of immense value to NALGO representatives on the staff side who have previously participated in the negotiations in the grading sub-committee of the National Joint Council.

AOA seeks to improve upon this arrangement and, in collaboration with four other professional associations, has now been granted direct representation on the staff side of the newly constituted grading sub-committee. In all, there will be nine members on either side of the table for this Committee, the remaining four seats on the staff side being held by NALGO. Decisions made by this Committee will still be subject to the overall approval of the National Joint Council. From this you will appreciate that AOA has made considerable progress during the past three years, but that no change has taken place in the basic formulation of the negotiating machinery. Although representing architects in local government employment directly at negotiating level, AOA must necessarily make use of the existing machinery which neither the staff side nor the employers' side of National Joint Council are prepared to consider altering.

Dependence on Parent Body

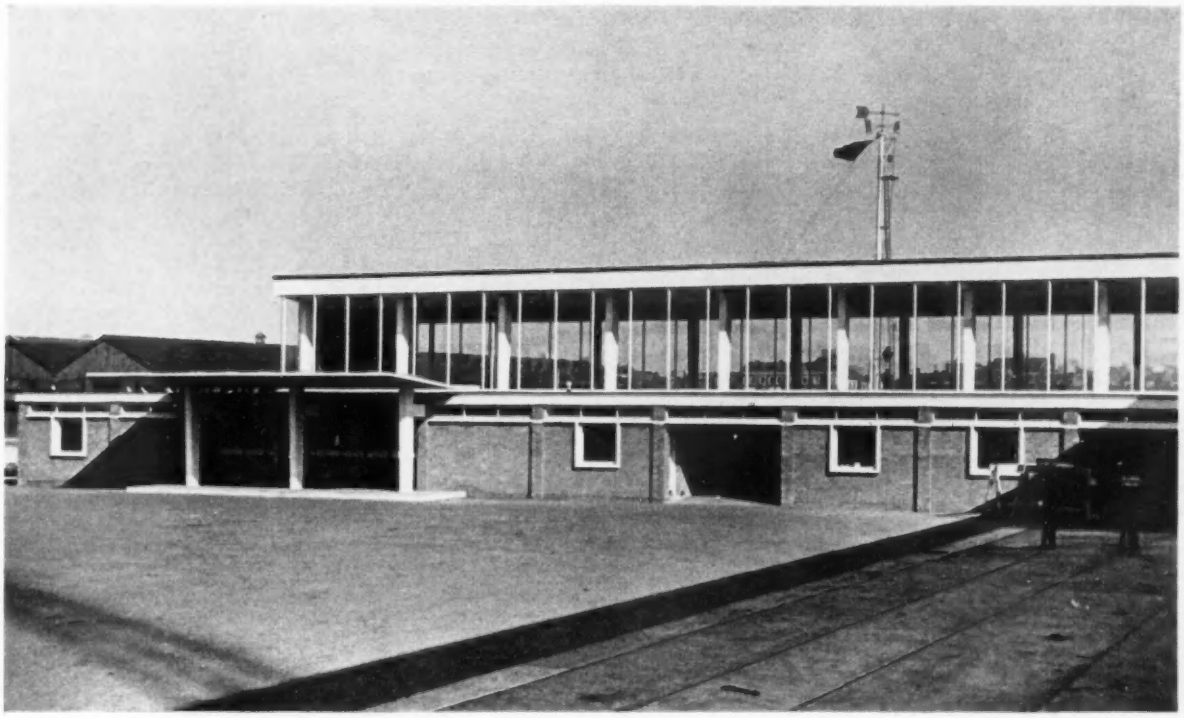
Although it may be true to say that members of the executive committee and the general council are quite deeply divided in their attitude towards NALGO, any disagreement springs from a lack of knowledge of the extent to which AOA is still dependent upon the good will of the parent body in order to function as fully as possible to the advantage of the membership of AOA.

The greatest lack of knowledge among our membership, is, perhaps, in the constitution of the National Joint Council. The staff side of the council is made up from representatives of all unions whose membership extends to the local government service. On the employers' side, it is representative of the Associations of Municipal Corporations, County Councils, Urban District Councils, Rural District Councils and the Metropolitan Boroughs Standing Joint Committees. On the staff side there are at present five trade unions involved of which NALGO, by direct right, holds only eight seats out of a total of thirty-one. NALGO also hold a predominant number of seats from provincial councils. This constitution will not be changed on either side of the table by the acceptance of AOA and the other four professional associations into the negotiating machinery.

I hope that this letter will go some way towards clearing up a number of doubts in your mind as to the relationship between AOA and NALGO. There is obviously a need for a much wider knowledge of the negotiating machinery to be brought to the notice of individual members of AOA. To this end, the executive committee are at present considering ways and means of both increasing membership and raising the level of appreciation among the existing members. This campaign may well take the form of visits paid by individual members of the executive committee to a series of meetings to be held within their respective areas of representation. In the meantime, however, it is hoped that this explanation will go some way towards answering the questions which are uppermost in most people's minds.

Dock Terminal Building, Hull

F. F. C. CURTIS, DR ING, ARIBA, architect, BTC
SIR BRUCE WHITE, WOLFE, BARRY & PARTNERS, consulting engineers
A. MONK & CO. LTD., general contractors



general view from the quay

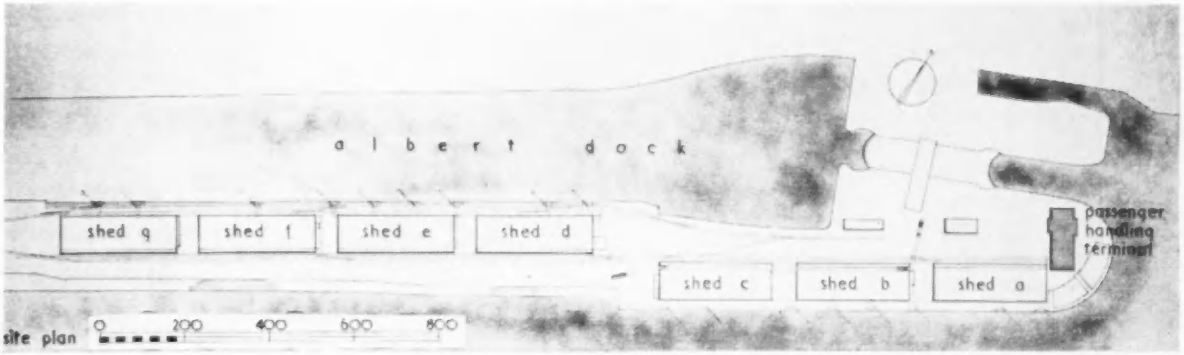
THE PASSENGER HANDLING TERMINAL has been provided to meet the needs of passengers between Hull and the Netherlands and Scandinavia. The building is situated at the eastern end of the new Riverside Quay, which together with the reconstruction of the quay on the south side, Albert Dock, form a complete stage in the modernisation of the Port of Hull.

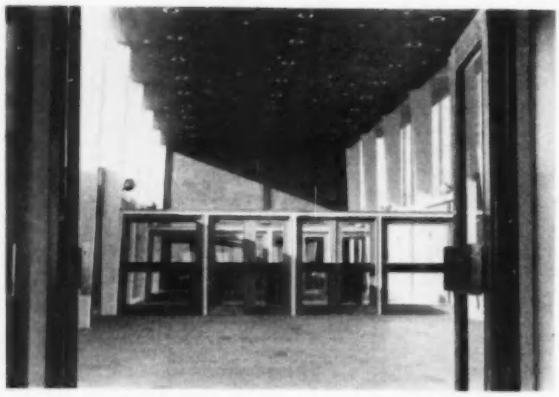
The passenger terminal has been designed to close the long vista from the western end of the quay and give a human scale in contrast to the high semi-portal cranes and the large transit sheds alongside.

The building is concrete framed, painted white, with a buff brick cladding. The accommodation required includes a customs hall, two immigration halls, with ancillary offices and toilet accommodation.

External doors are generally teak framed, and rubber industrial doors lead to luggage bays. The accommodation is arranged on one floor with the roof raised over the central customs hall, and immigration hall. The clerestorey thus formed gives uniform daylight distribution over all areas, and at night the internal illumination is such as to form welcoming lantern of the raised central area which is clearly seen from land and river. Continuous bands of high level glazing to the ancillary accommodation ensure good light penetration and privacy. Offices are provided with a 'picture window' at low level to enable easy viewing to the outside. External site works have consisted of tidying up paved areas and equipment.

Internally the finishes are either plaster or deep terracotta coloured facing bricks. Mansonia panelling in the customs hall links the low level ceilings to the clerestorey glazing. Others timbers used





are teak and elm. The flooring throughout is dove grey marbled linoleum with occasional directional inserts of a darker grey which forms an overall pattern.

A major feature of the waiting room is a wall mural depicting several of the vessels which over the years have been built at or based on the Port of Hull. The earliest example being a Viking long boat, and the latest, an early paddle steamer. The work is that of a local artist, Mr. Dennis Booth. Colours are related to the furnishings.

Apart from considerations of comfort and long-wearing properties, furniture and furnishings were chosen so as to avoid tendencies to be outdated before the completion of economic life. Hardwoods used are teak or mahogany and leather coverings coloured either BS 1023 or BS 7086. The curtains in the waiting room are a woven wool fabric of oatmeal colour.

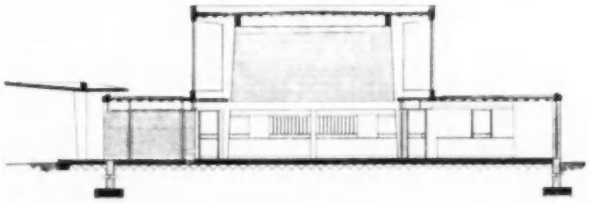
The heating is by electricity, floor warming and boosters. This method was used so as to cut maintenance to a minimum, since the use of the building is intermittent and quick warming-up periods may be required. The work was designed under the general direction of G. D. Lloyd, MICE, chief docks engineer, Humber Ports.

sub-contractors & suppliers:

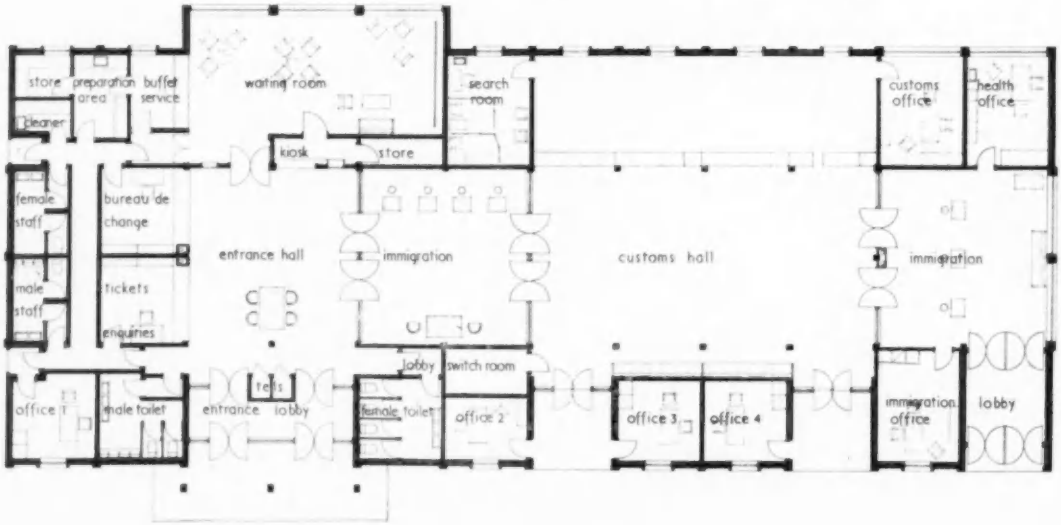
Wallspan panels: Williams & Williams Ltd.; *doors & joinery:* D. Burkle & Sons; *terrazzo faced partitions:* Arcanum Terrazzo & Stone Co. Ltd.; *suspended ceilings:* Expanded Metal Co.; *sanitary fittings:* Stitsons Sanitary Fittings; *rolling shutters:* Haskins Rolling Shutters; *painting:* Lightowler & Son; *electrical installation:* Wilfred Fairburn Ltd.; *linoleum:* Armstrong Todd Ltd.; *metal windows:* Williams & Williams Ltd.; *facing bricks:* Hall & Co.; *artificial stone & roof planks:* Stepney Stone Co.; *ironmongery:* G. & S. Allgood; *clocks:* English Clock Systems; *paints, etc.:* I.C.I.; *furniture & furnishings:* Russell Furnishings Ltd.

Top, the customs hall. Above, waiting room mural by Dennis Booth. Plan and section, scale: 1 in.=24 ft.

Dock Terminal Building, Hull



cross section through entrance hall



News of the Week

Plans for London Clinic

THE LONDON CLINIC, which stands between Devonshire-place and Harley-street, W1, is to be extended to double its present size. Some adjacent properties have been bought already, and others are still being acquired under the trustees' plans. Accommodation for the patients will be extended, and the new premises will house the clinic's pathological, radiology, radiotherapy and physiotherapy departments. Consulting rooms and accommodation for the nursing staff will also be increased. An outline planning application for building a new wing has been submitted to the LCC. Architects are Gunton & Gunton of St. Martins-le-Grand, WC2.

Research Grants in Surveying

THE TRUSTEES of the Education Trust of the Royal Institution of Chartered Surveyors invite applications from individuals or groups for grants for research in any branch of surveying. Applications from suitably qualified persons—who need not be chartered surveyors—should be accompanied by brief details of the proposed research and relevant expenditure, and should be sent to the Honorary Secretary, RICS Education Trust, 13 Great George-street, London, SW1, by October 31.

Research grants were recently awarded to Mr. A. W. Arends, MSc, Conservancy Land Agent for the Forestry Commission in North Wales (£110 for research in respect of a thesis on 'The sociological effects of forestry in Wales'); Mr. Cyril E. Hart, MA, lecturer in forestry at the Royal Agricultural College, Cirencester (£200 for research into the place of forestry in the economy of private rural estates); Mr. J. J. V. Hefford, a chartered quantity surveyor (£100 for research into the building industry in France, with particular reference to quantity surveying); and the Wildnerness Study Group (a group of young chartered quantity surveyors) (£150 for further research into the comparative costs of different forms of constructions or structures under varying conditions).

The Anderson and Webb Scholarship

THE RIBA ANDERSON AND WEBB SCHOLARSHIP has been awarded to R. C. Carrington, of Trinity College, Cambridge.

Design Research Fellowship

A NEW RESEARCH fellowship worth £750 a year, and believed to be the first of its kind, is to be awarded at the Royal College of Art by the English Electric Co. Ltd. next year. The offer is being made to enable young designers to work more closely with the electrical industry, in the complex techniques of translating creative ideas into practical use on the production line.

The award will allow the successful candidate to carry out research in the design and use of domestic electrical appliances as a post-graduate project for one year. A sum of up to £150 will also be awarded each year to those students who have carried out the best designs. The £750 fellowship will enable the best student in this group to do a post-graduate year of research in co-operation with the company designing domestic appliances for the future.

CPRE National Conference

THE THEME OF the twenty-second national conference on the preservation of the countryside, which is being held at Southport from October 12-14 next, is to be 'The Impact of Industrial Development on the Countryside.' The speakers will be Mr. D. Percival, BA, ARIBA, MTPI, City Architect of Norwich, on 'The Amenity Factor in Industrial Siting.' Mr. J. Casson, MTPI, of the Lancashire County Planning Department, on 'The Restoration of Derelict Land,' and Mr. P. A. Barnes, MBE, Secretary of the CPRE Lancashire branch, talking about 'The work of the CPRE in an industrial county (Lancashire)'. There will also be an informal discussion and a coach tour to local places of interest. The conference is not confined to members of the CPRE. The fee is 15s. per person or 10s. for subscribers to the CPRE or CPRW. Further details can be obtained from the Council for the Preservation of Rural England at 4 Hobart-place, SW1.

Downing-street Rebuilding

THE BOARD on the site of Nos. 10-12 Downing-street, which gives a synopsis of the history of the buildings, was erected on the suggestion of Mr. T. Fife Clark, Director-General of the Central Office of Information, and not (as suggested in our last issue) at the instigation of the builders who are carrying out the work of reconstruction. The board was designed and placed in position by the Ministry of Works.

Colonial Officers Study British Housing

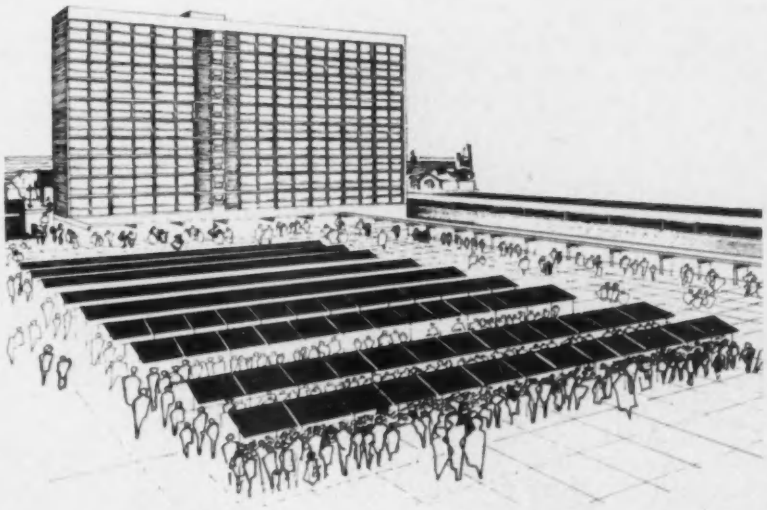
THE DEPARTMENT OF TECHNICAL CO-OPERATION has been holding its first study course in London during the past fortnight in conjunction with the Ministry of Housing and Local Government. Housing officers from various parts of the Commonwealth have been learning how housing in Britain is administered and financed, and have discussed how these methods might be applied in their own countries. They have studied housing problems in England and Wales and in Scotland, the planning of land, slum clearance and housing management.

European Roadworks Visit

MR. W. H. G. MERCER, borough surveyor at Rochdale, is to visit roadworks in Switzerland, Germany and Holland, with special reference to the bonding of asphalt to existing earth strata and related problems.

Ancient Monuments Reports

AMONG the many matters referred to in the seventh annual reports, 1960, of the Ancient Monuments Boards for England, Scotland and Wales (HM Stationery Office, price 1s. 3d. net) are the cleaning of buildings within the prehistoric stone circle at Avebury, the misbehaviour of spectators at the Midsummer Eve ceremony at Stonehenge, the safeguarding of the Roman Wall, the preservation of the ruins of the fifteenth-century Wingfield Manor, East Derbyshire, and the question of the retention of the tower of the Wren church of St. Alban's, Wood-street, in the City. The Corporation found this



WEST HAM MARKET PLACE DEVELOPMENT.—*This £237,000 contract on the site of a former street market will include 16 single-storey shops, one multiple store, 13 two-storey shops and a tower block of 80 dwellings. The 11-storey block will have an r.c. frame with concrete crosswalls. Cladding will be timber framed with glazing and brick in-fill panels. The area in front will be developed as a market centre. Completion in 18 months. Architect is T. E. North, OBE, FRIBA, Dist.TP, MTPI, Borough Architect and Planning Officer; quantity surveyors are J. A. Burrell, FRICS. Main contractors are Leslie & Co. Ltd.*

tower an obstacle to a new road improvement scheme, but it is satisfactory to note that it has now decided not to proceed with demolition. 6,853 monuments are now scheduled in England.

Vacant Post, Herefordshire

APPLICATIONS are invited by September 8 for the post of County Architect, Herefordshire, at a salary of £2,700 rising to £3,075. Details advertised elsewhere in this issue.

Assistant City Architects Wanted

A FIRST CLASS OPPORTUNITY is at present available in the city architect's department at Sheffield for assistant city architects. They would work under Sheffield's lively City architect, Mr. J. L. Womersley, FRIBA, who is anxious that these appointments should be filled quickly to enable the redevelopment of the city to proceed to a further stage without delay. Details of the vacancies are advertised elsewhere in this issue.

Deputy Architect, Bolton

APPLICATIONS are invited by August 25 for the appointment of a Deputy Borough Architect, Bolton, at a salary of £1,743 rising to £1,993. Terms and application form from the Town Clerk, Mr. Philip S. Rennison.

Retirement

MR. J. F. ANDREWS, engineer and surveyor to Hazel Grove and Bramhall urban district council, retires at the end of October after 25 years' service with the authority.

Coming Events

MONDAY, AUGUST 21

TOWN & COUNTRY PLANNING ASSOCIATION.—Visit to St. Pancras housing scheme. Laxton-pl. 6.30 p.m.

A Hundred Years Ago

From The Builder of August 17, 1861

VITALITY IN BUILDING OPERATIONS AT BIRMINGHAM.—It is scarcely six months since we examined into the condition of Birmingham, and we are glad to find that, although measures to improve the unsanitary state of the town, as to sewers and pavements, are still, comparatively speaking, only in embryo, considerable progress continues to be made in its architectural adornment. Indeed, with such rapidity have changes taken place in this respect since the publication of our notice, and so much do we find the public spirit smitten with the desire to be considered foremost in matters connected with street architecture, as we all know it also to be in mechanical prowess, that we are glad to have our eye again upon Birmingham to see whether these changes are for better or worse.

Obituary

Leslie Prior Hale, LRIBA

THE DEATH has occurred of Mr. Leslie Prior Hale, LRIBA, MIStructE, retired chartered architect of Middleton-on-Sea.

More Everyday Things

BY ARTHUR W. KENYON, CBE, FRIBA

55. The Passing of a Studio

I WOULD like to recount a simple experience which I encountered one day last winter when visiting a job in St. John's Wood. It is one that often returns to my mind when I look at new developments and wonder whether the character that once marked the different districts of London will find new expression in the new environments we are now creating.

It was a biting cold morning with wind that cut through to your very marrow. The area was without shops or buses; I was without a car and the taxi-men all seemed to have gone for their elevenses. The pubs were not open and no prospect of hospitality loomed in sight. My only thought was for shelter and hot liquid, and I looked round pleadingly for help. I spied the word 'Restaurant' over the entrance to a block of flats, so in I dived only to be told that they only served lunch, and this was not lunch time, but there was a place down the road where I might get a cup of coffee. I fought the blast again and found what appeared to be a florist's shop, but again I espied a little sign that said 'Restaurant' and in I dived once more.

I found myself in a large square room, partly panelled in sticky black panelling with a gallery at one end and a fireplace below, and an array of large forbidding oil paintings on the walls. The room was furnished with heavy dark oak tables and chairs to match, and these were set for lunch with plastic tablecloths, plates, knives, forks and water bottles. The place was utterly silent except for a cleaning woman polishing the floor.

I asked if I could have some coffee and although I was given quite plainly to understand that they did not serve coffee at this time of the morning, I was invited to come in and get warm and she would see what she could do. Eventually a waitress arrived with a cup of coffee-coloured liquid, which had the only virtue in which I was interested at that moment—it was hot.

The radiators along the walls were also hot, and as I gradually thawed out, I gave my attention to the cleaning woman. She had lived in the neighbourhood for twenty years and had watched the old splendour pass away. It was once the district, so she told me, of famous artists. The room in which I was sitting was a grand studio, and my mind went back to the early Victorian Age when actresses came to such places to sit for their portraits. Ugly as the room was, how noble it must have seemed with great canvasses and easels and the master himself appearing from the gallery to greet his patron. Yes, this was the studio of a great man, and a place of character.

But my cleaning friend had much more history to tell. Other great artists in the district had painted portraits of kings and queens, and she had watched them arrive for their sittings. She gave me a long list of famous names, but the great had now left, one and all, and the district had 'gone down.' Flats had been built where once grand houses had stood, and the district was now peopled by lesser actors and other anonymities.

She went on polishing the floor as she told me all this—an anonymous character herself, ageless, shapeless, but a character none the less and with a fund of knowledge that many social historians would

be glad to possess. She now cleaned this studio which did duty as a humble restaurant where you could bring your own wine and could take a table d'hote lunch, or dine between 6 and 8.30 p.m. I gathered that it was much used by the batchelor-flat-dweller types who probably found it simpler and cheaper to feed there than cater for themselves.

My coffee cost me sixpence and my entertainment and warming of body and spirits nothing, and all this was within ten minutes by taxi from Piccadilly Circus. I hope there will be something equally worth while to tell posterity when our new tower block dwellings recede into the pages of history.

Dumfries County Plan Approved

THE Dumfries county development plan has been approved, with modifications, by the Secretary of State for Scotland. Provisions have been made for extensive road improvement to trunk roads in the county, but the proposed Dumfries ring road has been programmed ouside the 20-year scope of the plan. The construction of the Black Esk reservoir and filter station and the extension of this water to Mid-Annandale and Eskdale is provided for in the development plan.

The Future of the Architectural Association

Working Party's Recommendations

The following summary of the report of the Working Party set up in 1959 by the Council to consider the future of the Architectural Association has been issued to members by the President, Mr. J. M. Austin-Smith, MC, FRIBA :

IN NOVEMBER, 1959, the Council decided to appoint a Working Party* 'To consider the future of the Architectural Association, with particular reference to the type of training it should provide.' The subjects suggested for study included:

1. The role or function of architects in society.
2. Education of architects generally for that function.
3. The AA School in relation to other systems.

The Working Party's report was received at the end of May, 1961, and discussed by the newly elected council at their second meeting—the first possible occasion—on July 11. The full report is a confidential document to council, including references to outside bodies which are not designed for publication; but the council is aware of the interest of the membership in the report, and has decided to publish a synopsis with quotations from the body of the Report, including the full summary of recommendations, accompanied by annotations derived from the council's own discussion.

In one important respect the council was compelled to act in advance of the receipt of the report, by the appointment in the spring of the new Director, who took office on June 1, and the new Head of the School, who takes office in September. The council are pleased to note that the Director and Head of the School, in their own analysis of the aims and future policy of the AA, have expressed opinions remarkably in conformity with those of the Working Party.

It will be noted that main emphasis in the terms of reference was given to the School. The wider and equally complex and important questions of the Association as such are of course intricately bound up with those of the School and are, in any case, the subject of continual review by the council.

The Principal Problems which have Emerged

Under this heading the Working Party isolates certain primary considerations. The first is *the balance between the desirable and the possible.* 'Nearly every possible improvement . . . implies increased financial expenditure, yet the finances of the AA are strictly limited.' It is pointed out that the principal source of income is students' fees. To an increasing extent these are paid by Local Education Authorities, but many fees are still paid privately.

'It seems to be necessary to maintain a large number of students at the School in order to ensure a sufficient gross income even if this implies a larger than ideal number of students in the School. This balance between income and expenditure appears to be sufficiently precarious to inhibit many activities which the AA might like to embark on—particularly those of a more experimental or adventurous kind.'

Nevertheless, 'during the past three decades the AA has—more than any other organised body of architecture in the country—been responsible for getting modern architecture accepted; this struggle is now won. . . . In the future the AA School should continue to offer a unique form of architectural education (unique in the sense of being experimental and adventurous); our reasons for this are that, from a positive point of view, this is the course which AA members would want to follow.'

The Structure of the School

In analysing *the structure of the AA and its resources* the report notes that 'the outstanding difference between the AA School and other schools of architecture in the country lies in the fact that the parent body, the Association, includes in its membership a very large number of practising architects, most of whom were trained in the AA School. This membership represents the real wealth of the AA and if the energies, talents and resources of members could be made more use of in the training of students this might go far to compensate for the limited financial resources available.'

In a single paragraph the report summarises some of the known present problems of the AA which arise because of its limited financial resources, which have a serious effect on staffing, restricted premises and space. There is also no residential accommodation for students, a lack which is all the more serious because the AA is a national, and not only a regional, school.

A concluding section in this first part refers to *Curriculum.* The working party made no attempt to rewrite the curriculum because they believed that this should follow and not precede policy decisions. 'The school committee is clearly the body best able to judge not only the value but also the practicability of introducing any changes.' The working party notes that they were impressed by the environmental framework of the curriculum, which they hoped would not be lightly discarded.

Future Policy

Having summarised present problems, the report then turns to *Future Policy.* The considered opinion is expressed that 'the quality of architectural education offered by the AA School should be the absolutely paramount consideration; how to pay for this must be secondary. If the education offered is good enough, the difficulty of finding the money needed to finance it may well not be insuperable. On the other hand if the quality offered is not good enough it does not really matter whether the AA School survives or not.'

The question is asked: is the AA 'concerned with the architect as an individual artist or is it more concerned with him as one of a number of professional men concerned in the activity of building? Some agreement must be reached within the AA as to the role of the architect in society before a clear policy for his training can be formulated. We feel that this basic sense of direction should be defined clearly even if it proves necessary, or desirable, to review such a definition periodically.'

The absolute necessity for co-operation with other skills and talents is emphasised—the more the architect learns of the language of these other practitioners, the easier is his communication with them likely to become.

Also, the architect must learn 'how to translate the environmental needs of a society into physical reality; he should be able to do so not only competently but with artistry.' 'He must have the capacity to analyse and understand the social intentions of the programme in a humanistic sense.' 'The architect should be trained to analyse the actual functions which a building is to perform as well as the activities which it is to house and he will—as he gains experience—learn amongst other things to discern the difference which often exists between what the client thinks he needs and what in fact he does need.'

'"Environmental needs" implies for the architect the capacity to understand the relationship between the buildings and the activities which will take place within and around them, to be aware of all the physical properties required—such as lighting, heating, ventilation, weatherproofness, etc.—of the shelter which is to be created, as well as the more obvious knowledge about how a building actually stands up.'

'The "translation" of needs into physical reality implies mastery of all the skills necessary to the planning of buildings in three dimensions as well as knowledge, of building techniques, etc. Competence extends beyond mere technical knowledge to legal knowledge, a capacity to exercise judgment, an ability to communicate with others, and, in short, the ability to control the whole operation of building from initial planning to completion of the building contract.'

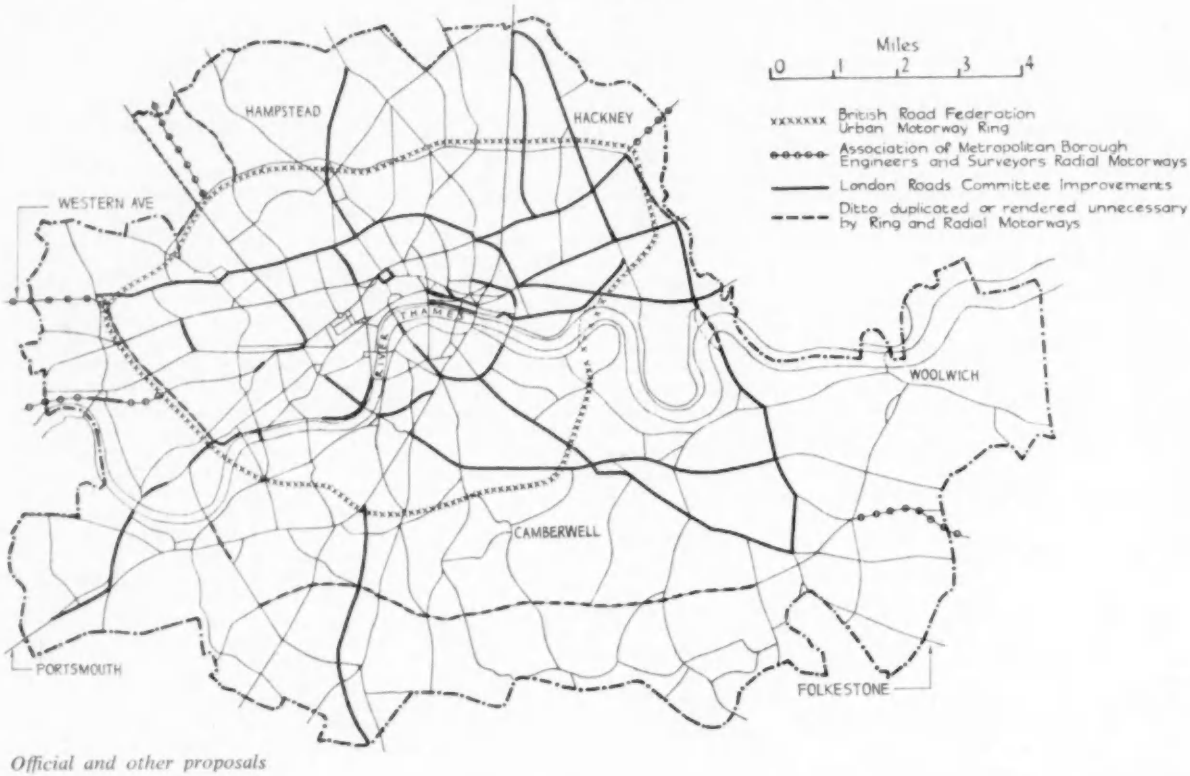
'"Artistry" implies that the essence—and ultimate justification of architecture

* *Chairman:* Peter Chamberlin. *Members:* Neville Conder, Gabriel Epstein, Robert Maxwell, John Morgan, Julian Mustoe, Michael Pattrick. Robert Furneaux Jordan was a member at the start, but was later forced to retire owing to the pressure of his other activities.

(Continued on page 302)

The London Traffic Problem and Its Solution

Some Suggestions by Mr. Donovan H. Lee



Official and other proposals

MANY of those who have studied the London traffic problem hold that the present authorised plans do not go far enough and that they are unlikely to be carried out at a speed commensurate with the expected increase of vehicles, so that the problem, instead of being ameliorated, will be intensified as time goes on. Mr. Donovan H. Lee, BSc, MInstCE, etc., who has given close study to the London traffic problem, has recently made detailed proposals for replanning and other improvements. These are briefly summarised below. At the same time we reproduce two plans, the first embodying the proposals by the British Road Federation for an urban motorway ring, those of the Association of Metropolitan Borough Engineers and Surveyors for radial motorways, and the proposed improvements of the London Roads Committee of the LCC; the second showing Mr. Donovan Lee's proposals with those of the London Roads Committee also included.

Mr. Lee stresses the point that improvements must be made to railways as well as to the highways. His proposals may be briefly summarised as follows:—

1. Develop as 'office cities' the space over and adjoining the various principal railway stations around the inner area so that commuter traffic tends to become concentrated in the areas which are best served by both surface and underground railways. Nearly all the London rail termini are completely out-of-date and some are already ripe for reconstruction as electrification and diesel trains now permit development of the 'sky-rights.'

There may be no need to limit the average height of these buildings, apart from considerations of light and air, within the area now occupied by the railways, but pedestrian subways or elevated footpaths would be necessary leading to large office buildings closely adjacent, and to nearby bus stops.

2. Improve the rail communications across the inner area so that these centres can be reached with, generally speaking, not more than one change from any of the main lines entering London. This would also assist residents in country areas in the south to work in office centres at Euston or Paddington, and in addition rail travel would be quicker between, say, Birmingham and Brighton. These two developments would be sufficient to induce many present and future daily motorists to use the railways because they would save time.

3. Proceed with the already approved road improvements of the London Roads Committee of the LCC at a faster rate, and in particular improve all the main intersections of the South Circular-road between Woolwich and Clapham Common, providing flyovers at points like Catford and underpasses or roundabouts at other points.

Provide an entirely new, partly elevated, highway from West Hill, Wandsworth, to connect the Portsmouth-road to the Chelsea Embankment. Provide an extension of the South Circular-road starting with a two-level junction at Clapham Common and a two-level junction where it would cross the Portsmouth-road-Chelsea Embankment new highway, continuing mostly as an elevated roadway over the West London railway to meet the continuation towards London of Western-avenue as previously proposed by the LCC.

At this point the new highway might not follow Talbot-road as the LCC once proposed but be separated from present roads and follow alongside the Metropolitan railway to Westbourne Park with a roundabout at that point and then passing at high level over the coal depot and the Western Region main line before coming down to a widened section of the Harrow-road. After crossing over the Edgware-road and over the nearby railway coal depot it could descend to below general road level and run alongside or over the Regent Canal to Camden Town. From Camden Town the new highway could be generally alongside the North London line, passing under most roads, rising to street level or with flyovers at a few important intersections.

With a branch from Victoria Park to Leyton for Romford and beyond, the route could follow alongside the railway to terminate near the disused Poplar Station close to the entrance to the Blackwall tunnel. This would form a complete

loop around the inner area of London. The route now suggested in North London is similar to the one proposed by the British Road Federation. This combination of existing highways and new motorways seems likely to give the maximum benefit for the cost and to be the minimum addition to the LCC proposals to satisfy present public opinion.

4. Construct car parks at a large number of outer and inner suburban railway focal points; for example, over the railway tracks at Putney, alongside them at Catford and similarly at other points. Also, construct car parking garages at various points just outside and at a few points inside an area roughly enclosed by the present 'pink zone.' Then prohibit street parking of private cars during the daytime for a total period exceeding 3 hours between 9 a.m. and 6 p.m. in any one day, Monday to Friday, other than to residents within that area showing a residence card and parking next to their residence. The new rail and car parking facilities would make it more convenient not to bring cars into this inner area for the whole day, but the car parking garages would provide for those who needed to do so. It should be noticed that this method would particularly help motorist shoppers and also would permit street parking for more than three hours if the excess is before 9 a.m. or after 6 p.m. It is also not dependent on parking meters but does not prevent their wider use. All cars parked in streets in the inner area should be required to show the driver's name and address and 'phone number where the driver will be so as to enable him to be readily called if the vehicle is causing obstruction.

5. Provide better public transport within the inner area, and to and from the parking garages and main line stations. New bus services seem necessary, which may be called 'blue' to distinguish them from the present Green Line and the red London Transport ordinary services in the inner area. These 'blue' buses could be 'pay as you enter' without conductors, and perhaps with one fare for the whole journey as in New York, and with routes as suggested later.

6. Permit parking of private cars on footpaths wherever the footpath is wider than strictly necessary and marked accordingly. Indeed, make it compulsory on many main thoroughfares. On other thoroughfares with wide footpaths, set back the kerb between trees and lamp standards and prohibit stopping elsewhere. White lines on the footpaths and present yellow kerb markings could follow explanations in the Press, but substitution of chamfered kerbs would need to be given some priority for many roads. This would increase by nearly 50 per cent the capacity of many streets in the inner area and would help to reduce accidents.

7. Provide rail access to London airport with a fast service to Victoria and also a local service extending to other focal points. The latter could be by stopping trains serving, say, Hounslow, Hammersmith and Paddington via Earls Court and Cromwell-road, which would allow for a station under the present BEA Air Terminal in the unlikely event of its not being replaced by a new terminal at Victoria.

8. Provide moving footpath subways with coin operated turnstiles at passenger interchange points which now involve crossing streets.

Proposed 'Blue' Bus Services

The services provided by the 'blue' buses might each start from a car parking garage and pass via a main line terminus in the vicinity and then traverse streets in the inner area to a similar car parking garage and another rail terminus on the other side of the central area. They would connect stations now without direct rail connections like Waterloo and King's Cross. It would be necessary for the services to provide the needed frequency between offices and retail shops and the railway stations and car parking garages at both ends of the route, as distinct from the bunching of some buses followed by the long gaps between others, so common with services on the present longer routes. The 'blue' bus routes could serve parts of the inner area which are at present not properly served; for example, the Harley Street area and Mayfair.

An example of a blue bus service route would be from a future car parking garage at Lisson Grove, via Marylebone Station to Victoria and to any car parking garage just beyond if not already served by an existing LT bus service. So that these services could work to a strict time interval (although the relatively short distances would help), street parking on the routes might need to be limited or prohibited.

Donovan Lee's proposals with those of the London Roads Committee shown by a broken line

The Future of the AA

(Continued from page 299)

—is the ability to design buildings which transcend their purely functional purpose and thus lift the solution on to a plane much higher than the merely competent —difficult though even this latter may be to achieve.'

Training to Fulfil this Role

Although to aim at training 'the complete man' in the Renaissance sense may be thought to be aiming too high, and although it may not be thought necessary to lecture students on sociology, physiology, philosophy, psychology, economy, managerial technique, the working party decided that it is none the less 'impossible to cultivate too synoptic an approach in an architect's thinking.' Even if everyone, in the process, may not become master architects, they may become very competent designers of individual buildings and 'acquire a grasp and critical understanding of the framework within which they make their contribution.'

The fact that art can be learnt is, they suggest, largely the justification for schools of architecture. As for techniques, these are 'not merely the ability to draw, or a knowledge of applied building construction, but basically, the cultivation of the ability to think clearly, to communicate clearly, and to work constructively from first principles based on a sound understanding of geometry, physics and chemistry.'

Post-graduate Activities

Considerable extension in AA facilities for post-graduate activities are necessary. Appreciative reference is made to the Department of Tropical Architecture, and it is suggested that even with existing limitations of accommodation and finance more can be done. Notably, a post-graduate course should be started in Urban Design, which is clearly the great challenge of architecture in the coming decades.

It is also suggested that there should be co-operation with 'the appropriate institutions' in provision of 'courses in general or technical subjects specifically designed for architectural students.' In this way AA students could be brought into contact with some of the best minds in fields of study other than architecture and might also be taken out of the sometimes too confining environment of Bedford-square.

Accommodation and Finances

The working party stresses that the AA must 'sooner or later' consider the acquisition of new premises adequate to house all the activities of the School. This need will, of course, become all the greater as post-graduate activities are extended.

The AA cannot hope to obtain a measurable increase in its income by raising fees, nor can the membership be expected to subsidise the School. Three possibilities are noted: (a) To seek endowments; (b) To seek grants for specific research activities; and (c) To seek more permanent financial support from public funds. 'Perhaps the most important principle to bear in mind when seeking financial support for the AA from outside sources is to obtain this on terms which would allow the School to benefit from this patronage without losing freedom so far as educational policy and direction is concerned.'

Affiliation

Collaboration in the LCC National School of Building is no longer possible but other possibilities of collaboration or affiliation exist in a university-wise direction even with universities outside London, if this were possible, so as to allow the AA School to remain in London. 'Such affiliation may appear to be extreme wishful thinking yet it should not be forgotten that if any university is considering the establishment of a school of architecture (as, of course, they ought to do if they do not already support one) the simplest way for them to do this is to 'acquire' an already established and flourishing school with a first-class reputation. If such a thing could be achieved the resources of the University Grants Committee could be counted on to take care of the financial difficulties which appear to inhibit the development of the AA School.'

Summary of Recommendations

The working party concludes the report with thirteen recommendations. These are given below with brief notes indicating the council's first views. In coming months the council will be giving detailed attention to the recommendations in consultation with the Director and Principal and a meeting of the Advisory Council of the AA will be convened for discussion of the report in the autumn.

1. It is essential, in the long run, that a different basis of financial support should be found than one which depends almost entirely on the income to be derived from the charging of fees.

In Council there was general agreement that dependence of the AA on student fees for its main source of income was highly unsatisfactory. But it was pointed out that if the Government carried out its tentative proposal to pay higher education grants without the restriction of a means test, the situation would change fundamentally. At present the overall cost of educating a student at the AA was considerably less than at almost any other school. The majority of AA students received State grants, but since many paid privately it was inadvisable to raise fees to an optimum level. This would become possible if all fees were covered by grants.

In general the council thought the recommendation to be too specific. They agreed that it was most desirable to find some other source of income to relieve the School from its present dependence on students' fees.

2. That the Principal should in no way be concerned with the raising of funds, as has sometimes been suggested.

The Council agreed that 'in no way' was too restrictive and that it would be better to say 'should not be responsible for. . . .'

3. That the AA should provide opportunities for post-graduate courses and research; the first new post-graduate school to be established should, in our view, be concerned with urban design. We further advise that many other suggested fields of post-graduate study which have been tabled from time to time should be reviewed and that particular consideration might be given to courses in landscape architecture, advanced design and building engineering services.

4. That the establishment of any new post-graduate courses should be approached with the intention—where possible—of obtaining eventual recognition by some recognised institution.

5. That the existing School Committee is quite able to control the establishment of new post-graduate schools without the need to set up any new committees.

6. That the possibility of establishing research fellowships supported by outside funds should be investigated.

7. That the possibilities and advantages of affiliation with other bodies should be vigorously pursued, particularly affiliation with institutions which would offer both academic and financial advantages to the AA.

8. That contact with other disciplines in other teaching institutions could be of positive value to AA students.

9. That the Principal should enjoy the widest discretion possible in the introduction of any changes in the curriculum.

10. That the present system of staff selection is satisfactory whereby the main responsibility rests with the Principal, and senior appointments to the teaching staff are advertised.

The above were all agreed.

11. That, in the interests of making students aware of at least some aspects of the practice of architecture while they are studying, an office adoption scheme—either as existing or in some improved form—should be pursued.

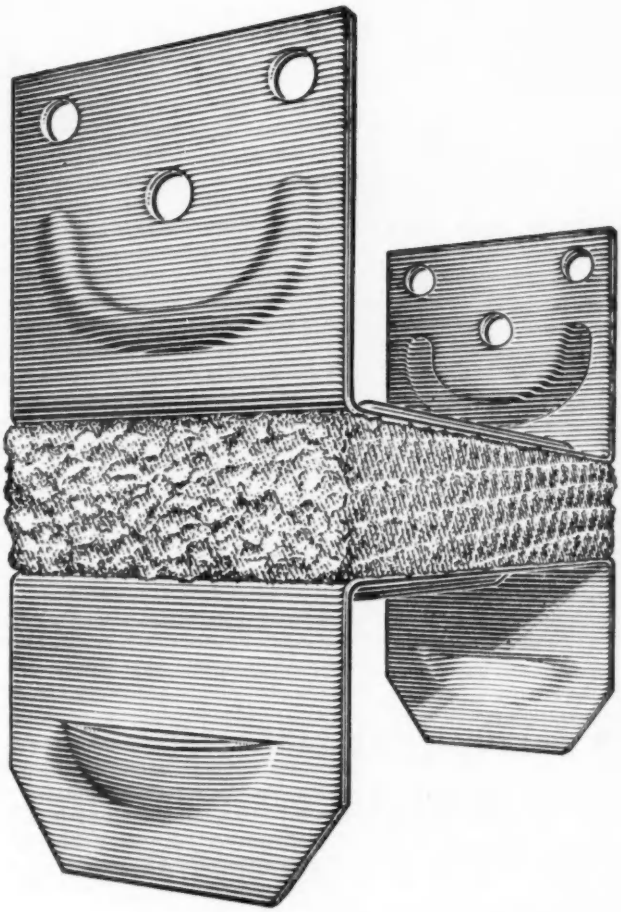
The council debated the value of the existing office adoption scheme and other possible schemes for providing experience of practice. Mr. Allen was asked to study the question and to report back.

12. That it is desirable for the AA School to remain in central London, although residential accommodation should be provided wherever the opportunity may arise (for example, it has been suggested that the Royal College of Art and the AA might well combine to build joint residential accommodation).

There was general agreement that the AA School must remain in central London and that, if hostel accommodation could be provided, it should if possible be shared with some other academic body or bodies.

13. That the AA should promote publication of reference material and, particularly, the translation of worthwhile architectural books otherwise only available in foreign languages.

This was agreed in principle, but the council believed that publication of the kind envisaged almost inevitably required subsidies. Liaison with the RIBA was necessary.



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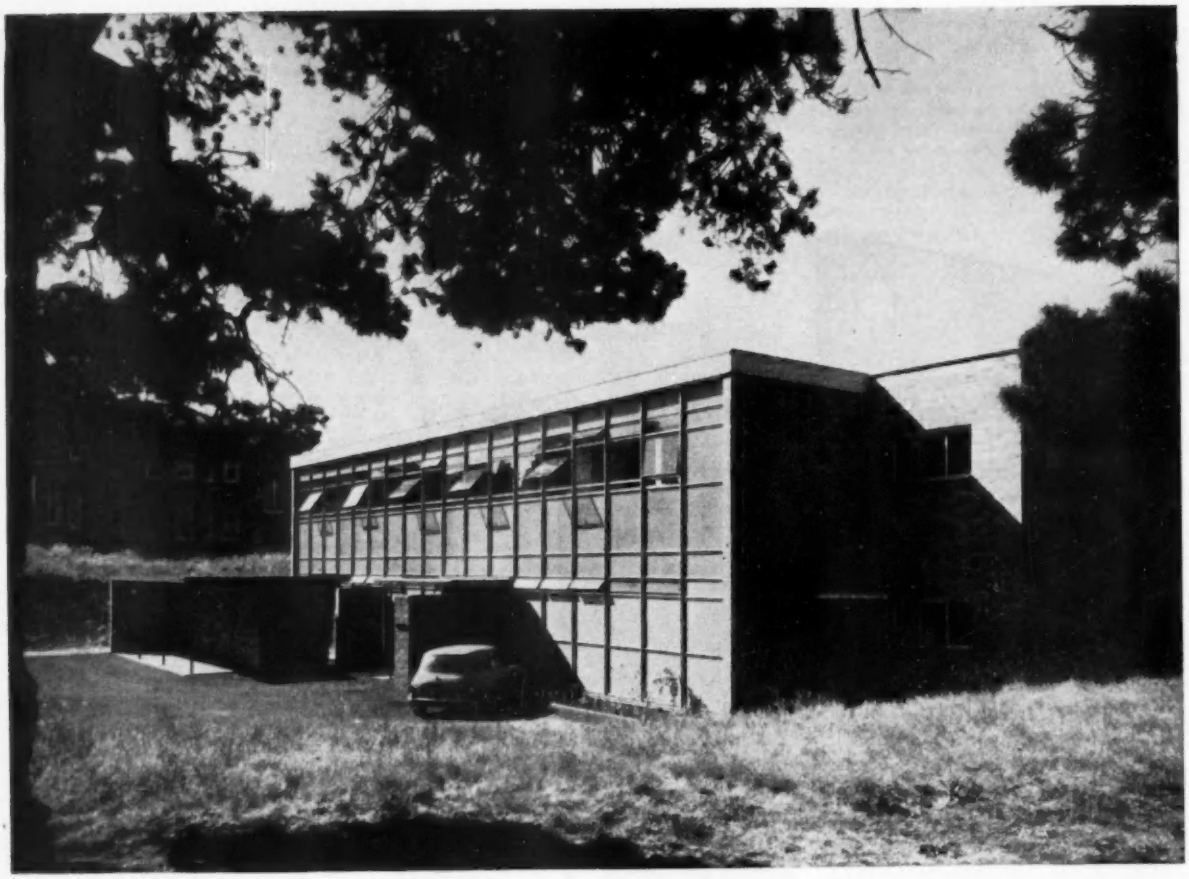

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Entry to the RICS

Academic Standards to be Raised

THE ROYAL INSTITUTION OF CHARTERED SURVEYORS announces that the minimum standards of entry to the professional examinations of the Institution will be increased with effect from October 1, 1962.

The new minimum standard will be passes in the General Certificate of Education at Ordinary level in five subjects at one sitting, or in six subjects at not more than two sittings. At present, the minimum requirements are passes in five subjects, of which only three need to have been passed at one sitting. Passes in English Language and Mathematics will continue to be obligatory.

Special provisions will be made to attract candidates with passes at Advanced level in the General Certificate of Education. The requirements will be:

(i) Passes in one subject at Advanced level and four other subjects at Ordinary level, to be obtained at not more than three sittings, and to include English Language and Mathematics; or

(ii) passes in two subjects at Advanced level and two other subjects at Ordinary level; to include English Language or English Literature, and Mathematics; or

(iii) passes in four subjects, including at least three at Advanced level; to include an English subject, and either a Mathematical subject or a Science subject.

A leaflet giving particulars of the requirements in the General Certificate of Education and other certificates of equivalent standard is available from the RICS, 12 Great George-street, SW1.

RIBA Fees for State Aided Housing

London Authorities May Re-open Negotiations

FROM A LOCAL GOVERNMENT CORRESPONDENT

LONDON and outer London authorities may make an attempt to re-open negotiations with the Royal Institute of British Architects with a view to establishing a special scale of architects' fees for State-aided dwellings in London.

This follows a report by Lambeth borough council that whilst they are not likely to be affected by the withdrawal of the RIBA scale of charges for State-aided houses, the effect of the withdrawal of the scale for multi-storey flats could be considerable in the case of a major scheme.

The borough council were perturbed about the possibility of the heavy increase in fees which they might have to bear.

Commenting on this the Metropolitan Boroughs' Standing Joint Committee say:

'The previous negotiations between the Local Authority Associations and the Royal Institute of British Architects were discontinued owing to failure to reach a satisfactory conclusion over a particular aspect.

'We feel that London is perhaps in a special position as regards housing schemes and that it might be possible for further negotiations to take place between the Royal Institute and representatives of the appropriate Local Authorities Associations and of the London County Council.'

The committee are accordingly obtaining the views of the Outer London Standing Joint Committee and the London County Council upon this suggestion.

House Purchase Scheme

BSA's Statement on Suspension

CONSULTATIONS have taken place between the Ministry of Housing and Local Government and the Building Societies' Association on the arrangements to be made to suspend the operation of the Government's House Purchase Scheme. Both the Minister and the Association recognise that it has made a valuable contribution to the growth of home ownership and the Minister's power to make advances remains unaffected by the Government's decision to suspend the present scheme. Fresh arrangements could therefore be put into force at any time when Parliament might again make funds available.

Of the £100m. provided by Parliament, more than £77m. has already been advanced to societies participating in the scheme or is on call by them. To enable the societies to fulfil their existing commitments to borrowers with the assurance that sufficient funds will be available, it has been agreed by the Ministry and the Association that the three months' notice to societies required under their agreements shall be given on September 1 next.

Thereafter the societies will be under no obligation to entertain new applications for advances, but will have until the end of November to make a final claim on the House Purchase fund. To enable these arrangements to be made, the Association has agreed to waive its right to six months' notice of termination of the scheme.

Board of Building Education

Two Study Groups Appointed

SINCE THE PUBLICATION of its last report in November 1959 on 'Management Studies for the Building Industry' the Board of Building Education has spent eighteen months of enforced hibernation to allow the Institute of Builders to finalise and implement its new scheme of Professional Membership Examinations. So runs a statement from the Institute of Builders, which continues:

With the Institute's new examinations being held for the first time in June, the Board has now re-emerged from its chrysalis and recently met to discuss a number of important developments in the field of building education and training. The Board decided that it could deal most effectively with one or two specific projects pursued energetically over a limited period, and accordingly set up two study groups whose terms of reference and composition are:

Site Management Study Group

TERMS OF REFERENCE: 'To identify the functions of site management in respect of major building projects and to define the scope of the responsibilities of those engaged in site direction and control of such projects.'

'To examine the existing pattern and adequacy of selection, education and training of such site managers.'

'To recommend to the Board what changes, if any, should be made.'

COMPOSITION: Chairman: P. M. Shepherd. *Representing IOB, NFBTE and Scottish Federation:* R. O. Gerrard, MA, Laurence J. Holloway, W. Kirby Laing, MA, William Nicol, MBE, D. E. Woodbine Parish and T. V. Prosser. *APTI:* D. A. G. Reid, BSc(Eng.). *ATTI:* T. E. Hall, DipArch. *NFBTO:* J. H. Mills. *RIBA:* Edward D. Mills, CBE. *Committee of Vice-Chancellors:* Prof. A. W. Hendry, BSc(Eng). *BRS:* J. W. Rice, BA. *RICS:* E. N. Harris, AFC.

Other members: Prof. Denis Harper, BArch. *Ex-officio:* Sir E. Graham Savage, CB (Chairman of the Board). *Co-opted:* A. G. Buck, Prof. R. C. Coates, BSc. (Eng.), P. H. P. Lovell, Robert Smith and P. E. Trench, OBE.

Graduate Entry Study Group

TERMS OF REFERENCE: 'To examine the report of the LMBA—"A proposed Building Course for Arts Graduates."'

'To assess the industry's needs for Arts graduates and graduates in subjects other than building, and to recommend what provision should be made for their recruitment and their education and training in building.'

COMPOSITION: *Chairman:* Gerald A. Hill, OBE. *Representing IOB, NFBTE and Scottish Federation:* R. O. Gerrard, William Nicol, T. H. Huxley Turner, CBE, and H. Vincent. *APTI:* D. A. G. Reid. *Committee of Vice-Chancellors:* Prof. A. W. Hendry. *Other member:* Prof. Denis Harper. *Ex-officio:* Sir E. Graham Savage.

Civic Trust Design Awards, 1960

Results of Competitions in the County Boroughs

TO ENCOURAGE an appreciation of civic design, the Trust has instituted annual awards for outstanding work in this field. The first competition was held in 1959 and covered the administrative area of County Councils in the United Kingdom. In 1960 the competition was open to County Boroughs throughout Great Britain. The competition is divided into two classes.

Class I: For the large scheme, normally affecting more than one building or structure, which best contributes to the proper planning and appearance of an area.

Class II: For the small scheme, involving no major building or structure, which best contributes to the appearance of its immediate surroundings.

The assessors are nominated by the President of the Royal Institute of British Architects. As in 1959, the entries have covered a wide range of development.

Class I entries included: Housing, Offices and Banks, Shops and Showrooms, Factories, Hospitals, Schools and Libraries, Bridges, Churches and Crematoria.

Class II entries included: Paved courtyards and terraces, Planting and landscape schemes, Reconstructions and restoration schemes, Road Improvements, A Water Tower, Public Conveniences, Kiosks and Shelters, A Bus Station, A Flagpole, Street Lighting.

The nature of the competition stresses that it is not only individual buildings that make for the good appearance of a town. It is created as much by the design of utilitarian things such as bridges, bus shelters, street lamps, paving, planting or by the removal of clutter or advertisements, as by the erection of expensive offices in the town centre or big housing estates on the outskirts. Size and cost have no validity in the competition but only the quality of the design in relation to the surroundings. A small building that 'fits' may well be more important to the character of a town than a large one that dominates the scene however good the design of the latter may be in its own right.

Many assessors complained of the poor number of entries and that only a small proportion were worth their serious attention. In 13 cases (out of 53) in Class I and 26 cases (out of 53) in Class II, the assessor was unable to make an award.

Although the awards and commendations made reached a satisfactory standard, it must be inferred, it is stated, from the assessors' reports that much of the work carried out in county boroughs during the last three years has made no contribution to the appearance of our towns, a sobering thought which it is hoped this competition will help to correct.

A further point which comes out clearly from the assessors' reports is the relatively small number of buildings which are designed as part of the town or street to which they belong. Too many entries were outstanding pieces of design in their own right but had no regard to their neighbours. Where adjacent buildings are themselves bad, there is perhaps no alternative open to the architect but to strike his own note and hope that subsequent redevelopment will follow his lead. But in many cases more respect could have been paid to the overall street scene—without copying the older buildings.

Sometimes, a good design has been spoilt by the addition of a bad feature for which the original designer was probably not responsible—an advertisement, some ugly light fittings, or even poles and wires. It has been necessary to give a commendation in such cases instead of an award since this might have been taken as condoning the bad addition to the original design. The awards and assessors are given below.

The Awards

ENGLAND AND WALES

BATH.—*Class. I. Award:* Redevelopment of Snow Hill. Architect: Snailum & Le Fevre, F/FRIBA, AMPTI. *Commended:* Foxhill Estate. Architect: J. G. Wilkinson, BArch, ARIBA, AMPTI. *Class II. Award:* Kingston Bath Site Improvement. Designer: W. Hartley, AMICE, AMIMechE, AMIWE, MRSH.

BIRMINGHAM.—*Class I. Award:* Lyndhurst Estate. Architect: A. G. Sheppard Fidler, MA, BArch.Dip.CD(L'pool), FRIBA, DistTP, AMTPI. *Commended:* Fairlawn Development. Architect: John H. D. Madin, ARIBA, Dip.Arch.(B'ham). *Commended:* St. James House. Architect: John H. D. Madin. *Commended:* Midland Employers Mutual Assurance Ltd. Offices. Architect: S. N. Cooke and Partners. *Class II. Award:* Landscaping to Moat at Hawkesley Farm Moat Estate. Architect: A. G. Sheppard Fidler.

BOLTON.—*Class I. Award:* Bolton Co-operative Society Bridge-street Store. Architect: Bradshaw Gass & Hope. *Class II. Award:* Bolton Corporation Improvement to Queen's Park. Designer: T. E. Clark, PPInst. PA.

BRIGHTON.—*Class I.* No entries. *Class II. Award:* Moulsecoomb Parkway. Designer: J. R. B. Evison. *Commended:* New Shopfront at 23 New-road. Architect: W. J. Thrasher, FRIBA.

BRISTOL.—*Class I. Award:* Rebuilding of 14/15 Royal York Crescent. Designer: L. W. Everett, FRICS. *Commended:* Tea Blending Factory in Cumberland-road. Architect: Beard, Bennett, Wilkins & Partners. *Class II. Award:* Conversion of Merchant Taylor's Alms Houses. Architect: Staff Architect, Lloyds Bank Limited.

BURY.—*Class I. Award:* Development at the Central Hospital. Architect: Charles B. Pearson & Son, FRIBA. *Class II.* No entries.

CANTERBURY.—*Class I. Award:* 34 St. George's-st. Designer: Lionel Fewster & Partners. *Class II. Award:* St. George's Terrace Garden. Architect: J. L. Berbiers, FRIBA, AMTPI, Dip.Arch.(Dist.)L'pool, Dip. TPM'chester; whose layout superseded an earlier one by the former City Architect, Mr. L. H. Wilson.

CARLISLE.—*Class I. Award:* Offices in London-road. Architect: Johnston & Wright. *Commended:* York School. Designer: L. J. A. Stow, AMICE, MIMunE. *Class II.* No Award. *Commended:* Motor Show Room in Lowther-street. Architect: Johnson & Wright.

CHESTER.—*Class I.* No Award. *Commended:* Cow-lane Bridge. Designer: City Engineer and Surveyor's Department.

COVENTRY.—*Class I. Award:* Willenhall Wood Housing Estate. Architect: Arthur Ling, BA, FRIBA, MTPI. *Class II. Award:* The Courtyard of the Municipal Offices, East-street. Architect: Arthur Ling. *Commended:* Forecourt of the Coventry Provident Building Society Offices, Warwick-road. Architect: C. F. Redgrave & L. A. Clarke, A/FRIBA.

DARLINGTON.—*Class I. Award:* Haughton Technical School. Architect: E. A. Tornbohm, ARIBA, AMTPI. *Commended:* Westminster Bank. Architect: Richard Brown, ARIBA, AMTPI. *Class II. Award:* The Green Tree Cafeteria. Architect: Godsmark & Miller-Williams. *Commended:* Haughton Green Improvements. Architect: E. A. Tornbohm. Designer: G. A. Short, MA, Ll.B, AMICE. *Commended:* Two shops at Stonebridge. Architect: Godsmark & Miller-Williams. *Commended:* St. Cuthbert's Green. Architect: E. A. Tornbohm.

DONCASTER.—*Class I. Award:* Offices for the Leeds Permanent Building Society. Architect: T. H. Johnson & Son, FF/RIBA. *Class II. Award:* Cantley Water Tower, No. 2. Designer: N. Cawley, BSc, MICE.

EXETER.—*Class I. Award:* Dunsford-road Housing Estate. Architect: Harold B. Rowe, FRIBA. *Class II. Award:* Southernhay Improvement. Designer: J. Brierley. *Commended:* Kiosks for car park attendants. Architect: Harold B. Rowe.

GLOUCESTER.—*Class I. Award:* Fountain-square, Westgate-street. Architect: J. V. Wall, ARIBA. *Class II.* No Award. *Commended:* St. Michael's Tower. Architect: Waller, Son & Ashwell.

HASTINGS.—*Class I.* No Award. *Commended:* Down Farm Estate, Ore. Architect: S. Ripley, Dip.Arch., FRIBA. *Class II. Award:* The Flagpole, Winkle Island. Architect: S. Ripley. *Commended:* The Stables Theatre. Architect: A. C. S. Hickes, Dip. Arch., ARIBA.

HULL.—*Class I. Award:* The Presbyterian Church, Prospect-street. Architect: Douglas Potter, ARIBA. *Class II. Award:* Lombard Bank Limited Offices. Architect: Elsworth Sykes & Partners.

IPSWICH.—*Class I. Award:* Sprites-lane Primary School. Architect: Johns, Slater & Haward, F/ARIBA. *Class II.* No Award. *Commended:* Shop, Offices and Repair Depot for Messrs. Batson. Architect: Peter Barefoot, AADip., ARIBA.

LEEDS.—*Class I.* No Award. *Commended:* Westminster Bank, Westgate. Architect: S. G. Lawrence, ARIBA. *Class II. Award:* The Nalgo Jubilee Garden. Designer: L. G. Knight, NDH, RHS(Dip.), FInst.PA.

LINCOLN.—*Class I. Award:* The Pelham Bridge. Designer: W. S. Atkins & Partners. Architects: Robert Atkinson & Partners. *Commended:* Housing development at Cottesford Place. Architect: Edward Craven, ARIBA, MTPI. *Class II. Award:* Aaron the Jew's House. Designer: A. Adlington.

LIVERPOOL.—*Class I. Award:* Bloomfield Green, two-storey flats for old people. Architect: Ronald Bradbury, PhD, FRIBA, AMTPI. *Commended:* Otterspool Promenade. Designer: H. T. Hough, MEng, MICE, MTPI. *Class II. Award:* Flats for old people, Walton Village. Architect: Ronald Bradbury.

MANCHESTER.—*Class I. Award:* Holt House, Dene-road. Architect: Harry S. Fairhurst & Sons, F/ARIBA. *Commended:* Needham Hill, Didsbury. Architect: Harry S. Fairhurst & Sons. *Commended:* St. George's Redevelopment. Architect: J. Austen Bent, Dip.TP, ARIBA, AMTPI. *Class II.* No Award. *Commended:* Piccadilly Bus Station. Architect: Leonard Howitt, MArch., DA(Manc), Dip.TP, DPA, FRIBA, MTPI.

MIDDLESBROUGH.—Class I. No entries. *Class II. Award:* 'Southend' Merton-road, Road and Landscape Scheme. Designer: J. A. Kenyon, MICE, MIMunE., MTPI.

NEWPORT.—*Class I.* No Award. *Commended:* Alway/Ringland Neighbourhoods Residential Development. Architect: Johnson Blackett, FRIBA, Dist.TP. *Class II.* No Award.

NORTHAMPTON.—*Class I. Award:* Flats at St. Katherine's Court. Architect: Brian Bunch, ARIBA, AMTPI. *Class II.* No entries.

NORWICH.—*Class I. Award:* New Housing Group in Rosary-road. Architect: David Percival, BA, ARIBA, MTPI. *Class II. Award:* Improvement of Ethelbert Gateway to Cathedral Close. Architect: Bernard

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Feilden, ARIBA. Designer: H. C. Rowley, MICE. *Commended:* Three-storey building for Dolcis in Gentleman's Walk. Architect: Ellis E. Somake, FRIBA, FRSA, FSIA.

NOTTINGHAM.—*Class I. Award:* Remodelling of Nazareth House. Architect: Bartlett and Gray, Dip.Arch., F/FRIBA. *Commended:* Shopfront for Robinsons Mantles Limited. Architect: H. J. Mein, ARIBA.

OXFORD.—*Class I. Award:* New Undergraduates' Building at St. John's College. Architect: Architect's Co-partnership. *Commended:* Conversion of Malthouse in Tidmarsh Lane. Designer: J. Lankester, MA, ARICS, AMTPI. *Commended:* Townsend House, old people's hostel, Headington. Architect: City Architect's Department. *Class II. Award:* John Perring Ltd., Shopfront and illuminated sign, George-street. Architect: Leslie Walker, ARIBA, MSIA. *Commended:* Shelters in South Park, Headington. Architect: City Architect's Department.

PLYMOUTH.—*Class I. Joint Award:* Pannier Market. Architect: Walls and Pearn, A/ARIBA. Frankfort Gate shops and flats. Architect: H. J. W. Stirling, ARIBA. *Class II.* No Award.

SALFORD.—*Class I. Award:* Stott-lane Branch Library. Designer: G. A. McWilliam, BSc, AMICE, ARICS, MIMunE. *Commended:* Flatlets for Humphrey Booth Trust. Architect: Leach, Rhodes & Walker. *Class II.* No Award.

SOUTHAMPTON.—*Class I. Award:* Freemantle Lake Park Recreation Ground. Architect: L. Berger, ARIBA, Dip.Arch. *Commended:* Holybrook Estate. Designer: F. L. Wooldridge, MICE, MIMunE. *Class II. Award:* Park Improvements at Pound Tree-road. Architect: L. Berger. *Commended:* Holyrood Merchant Navy Memorial. Architect: L. Berger.

SOUTHEND.—*Class I. Award:* Westcliffe-on-Sea Branch Library. Architect: P. F. Burridge, FRIBA. *Commended:* Belton Gardens, Overbridge. Designer: T. B. Hill, MICE, MIMunE, AMIWE. *Class II. Award:* House at 46 Leitrim-avenue. Architect: R. Wardill, ARIBA.

STOCKPORT. — *Class I. Award:* Doctors Green & Slater Rest Homes. Architect: Thomas G. Royle, ARIBA. *Commended:* Head Office and Flats, Gordon Emery Ltd. Architect: Mather and Nutter. *Class II. Award:* Mount Tabor Forecourt. Architect: John S. Rank, ARIBA. *Commended:* St. Lesmo-road, Public Conveniences. Architect: John S. Rank. *Commended:* Higher Hillgate Improvement. Designer: J. Shaw.

STOKE ON TRENT. — *Class I.* No Award. *Class II.* No Award.

SUNDERLAND.—*Class I. Award:* Development of Approach Road at West Park College of Further Education. Architect: Harvey C. Bishop, ARIBA. *Class II.* No Award.

SWANSEA.—*Class I. Award:* Offices for the General Accident and Fire Assurance Corporation. Architect: C. G. Tagholm, FRIBA, ARICS, FIArb. *Commended:* Reconstruction of St. Mary's Church. Architect: Sir Percy Thomas & Son. *Commended:* The Chalets at Southend, Mumbles. Architect: Peter D. Howell, ARIBA. *Class II. Award:* The Cross Keys Inn Restoration. Architect: O. S. and J. H. S. Portsmouth, F/ARIBA. *Commended:* Landscaping seashore at West Cross. Designer: R. D. Moody, AMICE, MIMunE.

WAKEFIELD.—*Class I.* No Award. *Class II. Award:* Thornes House School. Designer: J. M. Sedgwick, AMICE, MIMunE, AMTPI. *Commended:* Public Conveniences and Car Parking at Little Westgate. Designer: J. M. Sedgwick.

WALLASEY.—*Class I. Award:* Layout of Cadbury Bros. new factory and grounds. Architect: C. J. Wilkinson, LRIBA. Landscape: G. A. Jellicoe, MTPI, PPILA, FRIBA. *Class II.* No entries.

WALSALL.—*Class I. Award:* Orchard Hills Estate. Architect: Diamond Redfern & Partners. *Class II.* No Award. *Commended:* Paddling Pool and Tea Garden at the Arboretum. Designer: E. J. Winton, NDH, FILA, FIPA; M. E. Habershon, OBE, MInst.Mun.E.

WOLVERHAMPTON.—*Class I. Award:* New Retail Market in Salop-street. Designer: Borough Engineer's Dept. *Class II.* No Award. *Commended:* Public Conveniences, Shelter and sub-station at Chapel Ash. Designer: Borough Engineer's Dept.

WORCESTER.—*Class I. Award:* Worcester Crematorium. Designer: J. S. Williams, AMICE, MIMunE, MIWE. *Class II. Commended:* Sidbury Bridge Reconstruction scheme. Designer: J. S. Williams, AMICE, MIMunE, MIWE.

YARMOUTH. — *Class I. Award:* Shops at Gorleston. Architect: Graham Pegg, ARIBA. *Commended:* Office extension for Matthes Limited, Bakery Offices. Designer: A. J. Matthes.

YORK.—*Class I.* No Award. *Class II.* No Award. *Commended:* Restoration and alterations to 27 Stonegate. Architect: Brierly, Leckenby & Keighley, F/F/ARIBA.

SCOTLAND

ABERDEEN.—*Class I. Award:* The Self-Service Restaurant and Shop, Hazlehead Park. Architect: G. McI. Keith , Dip.Arch (Abdn.), ARIBA. *Commended:* The Bridge of Don widening and reconstruction. Designer: T. F. Henderson, MICE. *Class II.* No entries.

AIRDRIE.—*Class I.* No Award. *Commended:* New Police Headquarters. Architect: D. S. Bruce, ARIBA. *Class II.* No entries.

EDINBURGH.—*Class I. Award:* Canongate Redevelopment in Tolbooth and Morocco Land Areas. Designer: Robert Hurd. *Commended:* The Mound. Designer: City Engineer & Manager Lighting and Cleaning Dept. *Class II.* No entries.

FALKIRK.—*Class I.* No entries. Class II. *Award:* The Parish Church Gateway. Architect: A. J. M. Currell, Borough Architect, ARIBA, AMTPI.

GLASGOW.—*Class I.* No Award. *Commended:* Marland House, Office block George Street. Architect: Arthur Swift & Partners. *Commended:* The Church of the Immaculate Conception. Architect: Thomas S. Cordiner, FRIBA. *Commended:* Hutchesontown/Gorbals Redevelopment. Architect: A. G. Jury, CBE, FRIBA, FRIAS. City Architect. *Class II.* No Award.

GREENOCK.—*Class I. Award:* Crematorium at Caddlehill. Architect: Lockhart W. Hutson, OBE, FRIBA.

GREENOCK.—*Class I. Commended:* Old People's Houses at Ravenscraig. Designer: W. G. Dawson. *Class II.* No Award.

KILMARNOCK.—*Class I. Award:* Widening of Hurlford-road A.734. Designer: Borough Surveyor. *Class II.* No entries.

KIRKALDY.—*Class I. Award:* Links-street Redevelopment. Designer: Borough Engineer and Surveyor. *Class II. Award:* Sailors' Walk Renovations. Architect: Wheeler and Sproson.

MOTHERWELL & WISHAW.—*Class I. Award:* Offices for Motherwell Bridge and Engineering Company. Architect: Keppie Henderson & Partners. *Commended:* Housing at Greenhead/Campbell-street. Architect: Clark Fyfe, ARIBA, AMTPI. *Class* II. No Award.

PAISLEY.—*Class I.* No Award. *Commended:* George-street/Canal-street Redevelopment. Designer: John A. McGregor. *Class II.* No entries.

NORTHERN IRELAND

BELFAST.—*Class I. Award:* Shopping centre at Clara Park Housing Estate. Architect: J. W. Adamson, ARIBA, AMTPI. *Commended:* Office block, laboratory and canteen for Associated Feed Manufacturers. Architect: Munce & Kennedy. *Class II. Award:* Ormeau Branch Library. Architect: J. H. Swann, City Architect, FRIBA.

List of Assessors

ENGLAND AND WALES

Bath, Albert H. Clarke, ARIBA; Birmingham, Peter B. Dunham, DipArch, FRIBA; Bolton, L. W. M. Alexander, BArch, ARIBA, ARICS; Brighton, F. R. Greenen, BA(Arch), ARIBA, DipTP, AMTPI; Bristol, R. W. Paterson, ARIBA, AMTPI; Bury, M. G. Gilling, DipArch, FRIBA; Canterbury, R. A. Cooksey, TD, FRIBA; Carlisle, R. Allport Williams, MBE, BArch, FRIBA; Chester, Professer D. R. Harper, BArch, PhD, FRIBA, AMTPI; Coventry, A. Douglas Jones, DipArch(Liv), FRIBA; Darlington, S. W. Milburn, FRIBA; Doncaster, Cecil Leckenby, FRIBA; Exeter, F. K. Hicklin, ARIBA; Gloucester, E. F. Tew, DA(Glas) RWA, FRIBA; Hastings, R. W. Paine, ARIBA, ARCA; Ipswich, B. M. Feilden, ARIBA, AADip(Hons); Kingston-upon-Hull, A. R. Clarke, ARIBA, AMTPI.

Leeds, Professor John Needham, DipArch (Leeds), FRIBA; Lincoln, J. Gordon Woollatt, DFC, MA(Cantab), FRIBA; Liverpool, Leonard C. Howitt, MArch, DipTP, DPA, FRIBA, MTPI; Manchester, G. Grenfell Baines, ARIBA, AMTPI; Middlesbrough, Geoffrey A. Rowe, DipArch, ARIBA; Newport, Norman P. Thomas, MBE, TD, DL, DipArch (C'diff), ARIBA; Northampton, A. Sheppard Fidler, MA, BArch, FRIBA, AMTPI; Norwich, Herbert Tayler, AADip (Hons), AILA, FRIBA; Nottingham, Samuel Morrison, TD, FRIBA, MSIA; Oxford, Arthur Ling, BA, FRIBA MTPI; Plymouth, John Radford, ARIBA; Salford, F. Charles Saxon, FRIBA, FRICS; Southampton, Ronald Sims, ARIBA, AADipHons; Southend, Peter Barefoot, AADip, ARIBA; Stockport, J. L. Womersley, FRIBA, DistTP, MTPI; Stoke on Trent, H. Jackson, FRIBA, MTPI; Sunderland Professor J. H. Napper, MA, FRIBA, AMTPI; Swansea, Howard Williams, FRIBA, FRICS; Wakefield, Professor R. Gardner-Medwin, FRIBA; Wallasey, L. W. M. Alexander, BArch, ARIBA, ARICS; Walsall, T. W. Haird, FRIBA; Wolverhampton, Edward Holman, FRIBA; Worcester, S. E. Urwin, FRIBA; Yarmouth, D. E. Percival, BA, ARIBA MTPI; York, N. H. Fowler, FRIBA.

SCOTLAND

Aberdeen, T. E. Patrick, ARIBA, FRIAS; Airdrie, W. S. Gauldie, FRIBA, FRIAS; Edinburgh, J. A. Coia, ARSA, FRIBA, AMTPI; Falkirk, J. A. Carrick, FRIAS FRIBA; Glasgow, W. H. Kininmonth, RSA, FRIBA; Greenock, G. B. Biggar, DA(Glas), FRIBA, FRIAS; Kilmarnock, R. J. Naismith, ARIBA, MTPI; Kirkcaldy, D. W. Innes, FRIBA, AMIStructE; Motherwell & Wishaw, H. A. Wheeler, DA(Glas), ARIBA, AMTPI; Paisley, P. S. Ferguson, BSc, ARIBA, AMIStructE, AMTPI, FRIAS.

NORTHERN IRELAND

Belfast, J. D. McCutcheon, LRIBA.

Jersey's Development Plan

Building as Vulnerable as Tourist Industry

BUILDING HAS BECOME JERSEY'S third largest industry, according to a 59-page report, 'Island of Jersey Development Plan,' shortly to be presented to the island's government, the Jersey States.

The report says that the industry is as vulnerable as the tourist trade on which it largely depends. At the moment the industry is largely involved in speculative house building, but while there will probably be a continued opportunity for this kind of building in designed groups of houses, the builder should be required to conform to set standards.

It goes on: 'It would be unwise to encourage an inflationary expansion of the building industry which would drain labour away from other essential occupations. If major re-development schemes are agreed there will be a case for considering the employment of contractors from the mainland who could bring in a large proportion of their labour. This would of course bring its own problems, but if these could be overcome the advantages would be considerable.'

The report, which is an interim one, has been prepared by Mr. William Barrett and covers almost every aspect of island life. The second part, containing full development plans for the island, is expected to be ready in about two months' time.

The Week in Parliament

From Our Own Correspondent

Before Parliament rose on August 4 for the Summer recess, the following business of consequence to the building industry was transacted. As stated last week, the Houses resume on Tuesday, October 24.

Effect of Chancellor's Measures on Building

'THE CHANCELLOR'S MEASURES do not include any changes in university building programmes already announced,' said SIR EDWARD BOYLE, Financial Secretary to the Treasury, on August 3 during exchanges when he was asked about the location of the fourth new university. He said he regretted it had not been possible to make an announcement before the recess about this university but one would be made as soon as possible.

MR. REGINALD MAUDLING, President of the Board of Trade, when asked to what extent the current Government factory building programme in Scotland, and that for 1962-63, would be affected, quite categorically stated: 'I have not in mind any change in this programme. I do not intend to make any cuts in the programme in Scotland or in any other part of the development districts. We will continue to use our powers vigorously to deal with this situation.'

On the nuclear power station programme, MR. RICHARD WOOD, Minister of Power, stated in a written answer on August 3: 'I cannot yet say whether investment by Electricity Boards in England and Wales will be affected by the economic proposals recently made by the Chancellor of the Exchequer. I am discussing with the electricity industry the effect of these proposals in conjunction with the policy announced in April in the White Paper on the Financial and Economic Obligations of the Nationalised Industries.'

WDC to be Wound-up

THE WINDING UP of the War Damage Commission was announced by SIR EDWARD BOYLE, Financial Secretary to the Treasury, in a written reply on August 3, and legislation to enable the Government to do so is to be introduced (as briefly recorded in 'Notes of the Week' on August 11). Sir Edward stated: 'The Commission's present main function is settlement of cost of works claims, which are presented when the owners or occupiers of war damaged properties have carried out the work of reinstatement. The completion of this task is therefore, under the existing law, outside the control of the Government, and claims are likely to continue trickling in for a great many years. Annual payments against claims received amounted to £8.5m. in 1960-61, and are estimated to cost £7.5m. and £6m. in the next two financial years, respectively.

'The last war damage occurred more than 16 years ago, and the Government consider it desirable in the public interest to introduce legislation to dissolve the War Damage Commission, to provide for the transfer of the remaining responsibilities and staff to the Inland Revenue Department, and to secure the early closure of the payments scheme in an orderly way.

'A White Paper will be published to explain these proposals in more detail. Meanwhile arrangements are being made for the management of the staff of the Commission to be integrated with that of the Inland Revenue Department, while preserving the independent statutory position of the War Damage Commission under the existing law.'

Royal Assent to Bills

THE PUBLIC HEALTH BILL received the Royal Assent on August 3, and others that did so included the Highways (Miscellaneous Provisions) Bill, Great Ouse Water Bill, River Ravensbourne, etc. (Improvement and Flood Prevention) Bill and Newport Corporation Bill.

Among measures receiving the Royal Assent on July 27 were the Rating and Valuation Bill, Land Drainage Bill, Rivers (Prevention of Pollution) Bill, and Crown Estate Bill and Covent Garden Market Bill.

Other Business

Public Works Loans Rates

MR. ANTHONY BARBER, Economic Secretary to the Treasury, replying to questions by Mr. A. Henderson and Mr. F. Allaun, said: 'Government policy is that the rates of interest charged by the Public Works Loan Board should be kept in line with those ruling on the market. Market rates have been rising in recent weeks, and PWLB rates will accordingly be raised. From August 5, the rates of interest charged by the Board will be:

Period of Loan	*Per cent*
Up to 5 years	7½
Over 5, but not over 15 years ...	7¼
Over 15, but not over 30 years ...	7
Over 30 years	7

'It is not proposed to alter the conditions on which PWLB loans will be made available. In other words, the PWLB will continue to act as lender of last resort to local authorities who cannot borrow on reasonable terms on the market.'

MR. BARBER added: 'I would like to make it plain that the raising of these rates is not a deliberate measure to restrict local authority capital expenditure. It is simply an action taken in line with the policy pursued since 1955 in dealing with interest rates on loans made by the Public Works Loan Board.'

The Cost of Borrowing from PWLB

MRS. HARRIET SLATER asked the Chancellor of the Exchequer on August 3 what would now be the total cost of a school for which the tender price was £170,000, based on the 7 per cent interest charges.

MR. ANTHONY BARBER, Economic Secretary to the Treasury: 'Local authorities customarily borrow for 35 years for school bulding projects. On this basis, the repayments of capital and interest on a loan of £170,000 for school building would amount to £458,000.'

Development Near St. Paul's

LORD MANCROFT asked the Government in the Lords on July 24 whether the attitude of the LCC towards the Holford plan for the redevelopment of the area round St. Paul's would bring about any change in the Government's own policy in respect to the plan.

EARL JELLICOE, Parliamentary Secretary, Ministry of Housing and Local Government wrote: 'I am informed that the LCC have taken no new decision on Sir William Holford's proposals for the St. Paul's precinct. Their acceptance of the principles of those proposals is embodied in the written statement on policy which is now part of the London development plan.'

MR. JOHN PARKER asked the Minister of Housing and Local Government on July 25 whether a vista from the portico of the south transept of St. Paul's to the River Thames was to be added as part of the plan for St. Paul's precincts; and whether the building now taking place south of Carter-lane would allow for this.

MR. BROOKE wrote: 'The approved development plan provides for a vista between 40 and 50 feet wide from the Cathedral to the river, and no proposal has been made which would affect this. The answer to the last part of the question is in the affirmative.'

Hospital Standardisation

'It is more useful to standardise the component parts rather than the whole department,' said MR. ENOCH POWELL, Minister of Health, on July 24. He was asked by LORD BALNIEL when it was expected that the Hospital Design Unit would be able to make available to the regional hospital boards designs for standardised geriatric units which could be built quickly and economically.

MR. POWELL: 'The design unit produces building notes on the planning of various departments, including chronic sick wards, and is studying standard component parts which might be suitable for many types of hospital building. It is not proposed to design standard hospital departments.'

Agricultural Land for Building

VISCOUNT MASSEREENE AND FERRARD asked the Government in the Lords on July 24 how many acres of agricultural land in the UK had been utilised for building since the end of the war.

EARL WALDEGRAVE, Parliamentary Secretary, Ministry of Agriculture, wrote that complete figures were not available, but he issued the following information: *England and Wales:* The net amount of agricultural land taken for building between June, 1945, and June, 1960, was 464,200 acres. *Scotland:* No information is available before 1951, but the net amount of agricultural land taken for building and industrial development between June, 1951, and June, 1960, was 28,800 acres. *Northern Ireland:* It is

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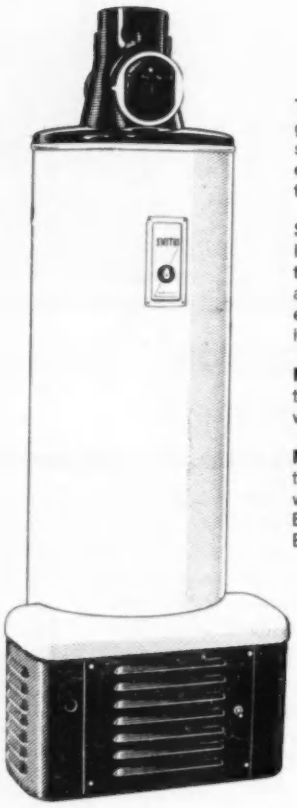

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estimated that since the end of the war some 10,000 acres have been taken for housing, and some 4,000 acres have been taken for industrial building.

Clean Air Act, 1956

MR. GERALD NABARRO asked the Minister of Housing and Local Government on July 25 what progress had been made in the five years to June 30, 1961, in securing implementation of the provisions of the Clean Air Act 1956, notably in the establishment of Smoke Control Areas in black areas denoted in the Beaver Report.

SIR KEITH JOSEPH, Parliamentary Secretary, Ministry of Housing and Local Government: 'In the black areas of England and Wales over 623,000 premises and over 102,000 acres are now covered by confirmed smoke control orders. Over 128,000 more premises and over 29,000 more acres in these areas are covered by orders submitted for confirmation. These figures, which are correct to June 30, indicate a substantial start, but continued vigorous use of all the Act's provisions is needed.'

Museums and Art Galleries

SIR HAMILTON KERR asked the Minister of Housing and Local Government on July 25 on how many occasions and to what amounts during the past 10 years loan sanction had been given to local authorities for new buildings, or extensions or rebuilding programmes for their museums and art galleries.

MR. BROOKE wrote: 'I regret that the information is not readily available for the period before the financial year 1956-57. The figures for that and subsequent years are as follows:—

Year	No. of Sanctions	Total for which Sanction given
1956-57	4	£29,608
1957-58	3	57,372
1958-59	2	9,104
1959-60	6	19,617
1960-61	21	231,723*
1961-62 to date	7	152,822

* Includes an apportionment of the loan to be expended on the museum and art gallery parts of a composite scheme comprising extensions to an existing library, museum and art gallery.'

The Public Record Office

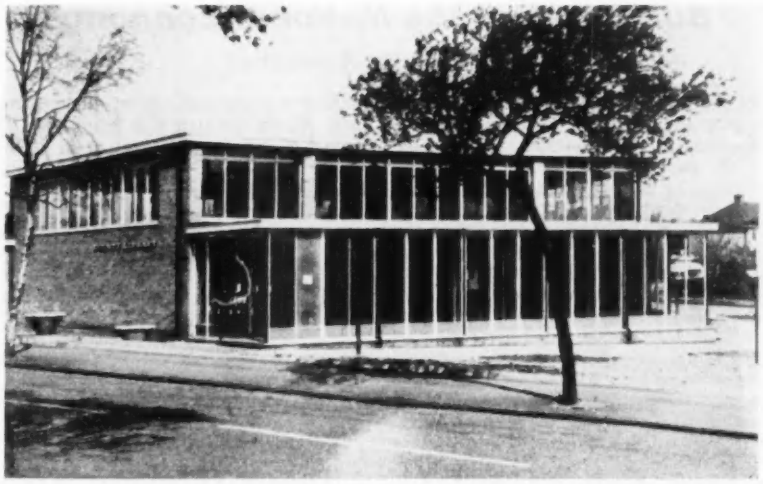
MRS. EIRENE WHITE asked the Minister of Works on July 25, what proposals were in hand for improving accommodation at the Public Record Office.

LORD JOHN HOPE wrote: 'Alterations to be carried out in August will make available an additional 30 seats for searchers in the Public Record Office. There are also proposals for extensions of the present building to provide a new and larger reading room and an administrative block.'

Skyscrapers in London

MRS. JOYCE BUTLER asked the Minister of Housing and Local Government on July 25 if he would consult with the London County Council, with a view to appointing an expert panel to consider all applications for the building of skyscrapers in the vicinity of the Palace of Westminster and other historic London buildings before planning permission was granted.

MR. BROOKE wrote: 'The Minister of Works is consulted on all development within half-a-mile of any Royal Palace or Park, or the Palace of Westminster, which might affect the amenities of the Palace or Park, and I am quite sure that the LCC take account of the effect of proposed high buildings on other historic buildings before giving planning permission. The Royal Fine Art Commission are available for consultation whether by a developer or by the LCC or by me. I do not think we should improve the outcome by setting up yet further machinery.'



BRANCH LIBRARIES IN ESSEX.—*The first stage of a planned programme of branch libraries throughout Essex, financed by a combination of Government grants and loans, has been completed by the county council. The completed libraries, of which the one above is a typical example, are at Debden, Harold Hill, Harold Wood, Shenfield and Canvey Island. A sixth, at South Hornchurch, is in course of erection. The libraries are equipped with air heating equipment supplied by the Wanson Co. Ltd., Boreham Wood, Herts. 'Thermobloc' air heaters, including the fuel tank and the fan which distributes the heated air, are housed in brick chambers with access in each case from outside the main library building. Ducts pass through the floors to unobtrusively sited diffuser outlets. The libraries were designed under the direction of the county architect, Mr. Harold Conolly, CBE, FRIBA*

Schools in Green Belts

MR. SIMON WINGFIELD DIGBY asked the Minister of Housing and Local Government on July 25 whether it was now his policy that new schools should be built in a green belt whenever possible, instead of in areas designated for building development.

MR. HENRY BROOKE: 'Schools ought not to be built in a green belt simply because the land there is cheaper. Most schools need to be near to the homes of the boys and girls, and this factor alone will normally rule out a site in a green belt. But there are cases where the most suitable site in all the circumstances may be in a green belt, and I would not think that green belt zoning should be held to preclude absolutely such a use as a school.'

Provision of Parking Harbours

MR. SIMON WINGFIELD DIGBY asked the Minister of Transport on July 26 what plans he had for encouraging the provision of parking harbours where pavements are wide, similar to those in Berlin, so that extra parking space can be provided without the flow of traffic being impeded.

MR. ERNEST MARPLES: 'This is already done in some places, but there is not much scope for it. Where bays can reasonably be cut into pavements on busy streets in this country the space is normally better used by vehicles loading and unloading or picking up and setting down passengers. But highway authorities are free to provide parking space in this way where circumstances permit.'

Size of Roads Programme

When SIR BARNETT JANNER suggested during questions on July 26 that the size of the roads programme should be doubled, MR. ERNEST MARPLES said they were already devoting a large proportion of their resources to it and it would be wrong for him in present circumstances to hold out any hope of an increase of the order suggested. He added that there was an overload on the building industry. For example, there were 1,111 vacancies for carpenters in London and the South-East but only about 230 carpenters registered as unemployed. Merely to announce an astronomical figure, as had been suggested, would be disastrous.

Building Standards, Scotland

MR. NEIL MCLEAN asked the Secretary of State for Scotland on July 27, whether he would now publish draft regulations under Section 3 of the Building (Scotland) Act, 1959.

MR. J. S. MACLAY wrote: 'Yes. The draft Building Standards (Scotland) Regulations, 1961, are now ready and, together with an explanatory memorandum which incorporates the report of the Building Standards Advisory Committee, will be on sale today. The period for lodging representations on the draft regulations will end on December 1, 1961, and I hope all concerned will carefully study the draft Regulations before that date.'

Building and the National Economy

Checking Public Expenditure

THE PART which local authorities will have to play in adjusting the level of public expenditure is underlined in Circular 37/61, dated August 10, in which the Ministry of Housing and Local Government draws attention to the statement on the economic situation made by the Chancellor of the Exchequer in the House of Commons on July 25. The circular points out that unless improvement is made in export markets this country cannot hope for the continued betterment in general conditions which we have grown to expect, or even for the maintenance of our present standard. The Government's first aim, the circular continues, is to slow down the rise of home demand to reduce the inflationary pressures which are helping to drive up costs. Government departments are putting into operation the restrictions on future expenditure announced by the Chancellor, and will be scrutinising very closely all expenditure proposals, including those for new capital works coming to them from local authorities.

Capital Expenditure

The check on the rate of growth of capital expenditure to be applied by Departments pays regard to the national load on the building and civil engineering industries. But an undue concentration of public projects in a particular local area can still lead to a gross overload locally and in consequence a sharp increase in prices. Any authority which finds that prices that seem to them too high are being offered in tenders for contracts, should, in their own as well as in the national interest, the Ministry advises, decline acceptance of such tenders and defer the project until lower quotations can be obtained.

From the review which has been made centrally, at the stage now reached, it is already clear that the contemplated expansion in public services for the next five years would out-strip the likely rate of growth of national resources to an extent which cannot be allowed. While the main services should continue to grow, the rate of growth must be kept under control. The necessary alterations in forward planning and programming in the several services will be notified to local authorities by the Departments responsible. The long-term objective is to keep the rate of growth of total public expenditure of all kinds in proper relationship with the resources likely to be available, and to settle priorities in the national interest.

In the short term, the amount of capital work which is at the present time being attempted is greatly in excess of what the building and civil engineering industries can efficiently handle. The aim here must be that the total capital expenditure of local authorities in 1962-63 should not significantly exceed the level of the current year. In view of the large numbers of authorisations which have already been issued (and in respect of some of which contracts may have already been let) this means that the amount of other new work for which authorisations and sanctions can in the future months be issued will have to be materially reduced; and since some programmes must continue to increase, this means that others must, without delay, be abated below recent levels.

Housing

In the sphere of local authority house-building there have been clear indications over the past months of growing pressure on building resources. Tender prices have risen, the time taken for completions has lengthened, and the number of houses in the 'pipe-line'—either under construction or in tenders approved but not started—have tended to pile up. An increasing number of authorities have found difficulty in placing contracts. This situation will worsen if authorities as a whole seek to maintain their building effort at the present rate; the only result would be that it would become still more difficult for them to carry out their programmes economically and efficiently. It is therefore in their own interests that the total number of houses to be put into contract by local authorities during 1962—over and above those already in the pipe-line—should be reduced below recent levels.

Consideration of Priorities

It is not envisaged that this slowing down of council house-building starts should be achieved by a flat rate reduction of individual programmes, without regard to the size and urgency of the housing problems of different authorities. The Minister feels sure that all authorities will agree that the overall programme should be so adjusted as to involve least interference with the programmes of those authorities whose needs are greatest. He hopes moreover that all authorities whose problems cannot truly be said to be urgent will, of their own accord, keep down their housing proposals for next year, thus making a contribution to the common good and the solution of a national problem.

Local authorities are reminded that, in framing their proposals for 1962, priority should be given to building for slum clearance, for the accommodation of the elderly, and for the rehousing of families living in badly overcrowded and squalid conditions. A few authorities will also need to give priority to overspill building. When considering proposals by individual authorities, the Minister will have close regard to these priorities. He will also take account of the relative urgency of their problems, as well as of the number of houses already approved or under construction but not completed.

Research on Mechanisation in Plastering

Combined BRS/NFPC Programme

A PLANNED PROGRAMME of research into the mechanisation of plastering operations has been announced by the National Federation of Building Trades Employers. The new developments in plastering which were discussed at the Conference in London in June ('The Builder' of June 30), organised by the National Federation of Plastering Contractors, have aroused considerable interest in the industry. Mechanisation was discussed in a paper by a past-president of the Federation, Mr. J. S. Cook.

One of the subjects discussed at that conference, the increased mechnisation of plastering operations, is now to be the subject of research by the Building Research Station in full collaboration with the National Federation of Plastering Contractors. As a result it is hoped to provide the industry with an objective account of what part machines can play in producing good plaster-work. Subjects to be dealt with include suitable mixes for machine plastering; the quality and durability of machine-applied as compared with hand-applied plaster; the kind of operation for which mechanised plastering is most suitable; and the capabilities of existing machines and how they can be improved.

It is expected that the results of the inquiry will give a considerable impetus to the development of mechanised plastering and will thus help in the solution of one of the main difficulties of the plastering craft, namely, the present acute shortage of craftsmen. The National Federation of Plastering Contractors hope to begin this important research in collaboration with the Building Research Station early in September.

LMBA

Japanese Builders' Visit

A SMALL PARTY of Japanese builders visited the LMBA on Thursday afternoon, August 10, for an exchange of views on the building and construction industry. Mr. P. H. Bates, FIOB, Vice-President LMBA, welcomed the party, and introduced the speakers—Mr. R. D. Macleod, OBE, FIOB, who briefly outlined the work of the national contractor in this country, Mr. E. Smith, FIOB, who explained the activities of the medium-sized building firm, and Mr. J. T. B. Crouch, who described the organisation of the London Master Builders' Association.

During the questions and discussion which followed the talks comparison was made between the cost of buildings in London and in Japan, the labour situation—which is also acute in Japan—and restriction of heights of buildings in London. Rates of pay appear to be very similar at the present time both in London and Japan, and the visitors also expressed the view that it was very difficult indeed to attract young men into the industry, and were keen to learn more of the Association's efforts in this direction.

The silence that was Rome...

The new ceiling of the famous Kingston Baths, Bath. City and Waterworks Engineer: W. Hartley, A.M.I.C.E., A.M.I.Mech.E., A.M.I.W.E., M.R.S.H.

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Book Reviews

Hospital Pharmacy Planning; Foundation Failures; Prestressed Concrete Simply Explained; Audel's Domestic Water Supply

**** Books noted in these columns may be obtained on application to the Book Dept., 'The Builder,' 4 Catherine-street, Aldwych, WC2. Cash (to include postage on books to the value of 10s., 9d.; over 10s., 1s. 6d.) should accompany the order.*

HOSPITAL PHARMACY PLANNING. A guide for administrators, architects and pharmacists, second edition. (Harrow, Middlesex: The Guild of Pharmacists) Price 5s. 6d. net.

THE GREAT INTEREST being shown nowadays in hospital planning has made this new edition timely. The practice of hospital pharmacy has undergone great changes in recent years, and many existing pharmacies are inadequate to cope with modern needs. As a result, and especially in the light of the new hospital building programme, many administrators, architects and pharmacists are now engaged in planning improvements and extensions to existing departments, and the construction of completely new ones. The information in this booklet is of direct interest to all those who are concerned in such planning.

The booklet deals first with the basic planning of the pharmacy in relation to the other departments of the hospital. It then discusses the floor-space requirements in hospitals of various sizes, and the allocation of this space between the different sections of the pharmacy (dispensary, manufacturing laboratories, sterile-products laboratories, storage, etc.). It deals with the way in which a hospital pharmacy should be organised and includes specimen floor plans.

Guidance is given on the choice of the most appropriate surface materials for floors, walls and benches, and on the planning of mains services and the disposal of waste. The supply of filtered air for sterile-products laboratories is discussed in some detail. The section on furniture and fittings includes illustrations of a variety of fittings suitable for the storage of tablets, ointments, labels, etc., and a separate chapter is devoted to service points, suggesting some alternatives to the traditional out-patients' window.

The final chapter describes the planning and organisation of a central sterile supply department which in some hospitals is the responsibility of the pharmacy. Information is given about space requirements and there is a detailed work-flow diagram.

FOUNDATION FAILURES. By C. Széchy. (London: Concrete Publications Ltd.) Price 20s. net.

FAILURES IN FOUNDATIONS are sometimes due to causes of which no information is available. An engineer cannot be blamed for not foreseeing the unknown, and in such cases his reputation would not be harmed if details of the design and of the phenomena that caused the failure were published for the guidance of others. It is, however, natural that engineers should not wish to draw attention to their mistakes, even though they may be due to unforeseen circumstances. It is therefore a most commendable achievement that this account of failures which actually occurred should be written by an engineer who has himself had a share of the responsibility for some of them. Mention must also be made of Hungarian engineers who co-operated in permitting Mr. Széchy, who is himself a Hungarian and Professor of Foundation Engineering at Budapest, to describe failures with which they had been connected.

Mr. Széchy's book includes examinations of failures experienced in Hungary (published in that country in 1957) and defective foundations in other parts of the world. The causes of failure are diverse, but the examples give direct attention to the major possibilities of failure, in both design and construction, and discusses the possible remedial measures.

The causes are classified into four groups. First, the absence of a proper investigation of the site or a wrong interpretation of the results of such an investigation. Second, faulty design of the foundation or superstructure. Third, defective temporary works or poor workmanship in the construction; and finally, the insufficient provision for exceptional natural phenomena, such as thermal and biological conditions, rainfall, and floods greater than those hitherto recorded at the site. Most forms of ordinary and piled foundations are dealt with, and in particular the foundations of many types of buildings, bridges, industrial storage, marine and riverside structures. The text is well illustrated and has a useful list of bibliographical references.

PRESTRESSED CONCRETE SIMPLY EXPLAINED. By H. Kaylor. (London: Contractors Record Ltd. New York: John Wiley & Sons, Inc.) Price 28s. net.

ARCHITECTS, engineers and students who wish to extend their knowledge of reinforced concrete to the relatively new technique of prestressing will find a suitable introduction in this new volume. As Edward Mills states in his Foreword, the art of explaining any complicated technique in a simple way is one which is not sufficiently practised. It is therefore gratifying to find that Mr. Kaylor's book explains in lucid terms the principles, methods, development and design of prestressed concrete. It is most important that architects and engineers should understand the principles of the techniques they employ, and this book will certainly contribute to this understanding and produce an awareness of the technique's potential. Builders, too, will find the text a useful practical guide.

The author begins by explaining the basic principles, making easily understood comparisons with ordinary reinforced concrete. Under the heading 'methods and applications' Kaylor deals with two methods of pre-tensioning—'individual mould' and 'long-line'—and six methods of post-tensioning. The latter include Freyssinet, Lee McCall, Gifford-Udall and PSC one-wire.

Having provided a background of principle, method and material the author proceeds to design of simply supported beams, giving two fully worked examples of pre-tensioning and one of a post-tensioned unit. In this section there is a useful table of calculations showing a comparison between Freyssinet, Magnel-Blaton and Lee McCall. Subsequent chapters deal with composite construction—the combination of precast prestressed units with added in-situ concrete; and liquid-retaining structures, such as dams and storage tanks. The penultimate chapter gives some interesting descriptions of works already carried out in prestressed concrete. Miscellaneous items, such as fire resistance and piling, are covered, and there is a list of notation symbols and a useful bibliography.

AUDEL'S DOMESTIC WATER SUPPLY AND SEWAGE DISPOSAL GUIDE. By Edwin P. Anderson. (New York: Theodore Audel & Co. London: Bailey Bros. & Swinfer Ltd.). Price 34s. net.

THE PURPOSE of this book, states the prefatory note, is to provide instruction and guidance to both professionals and laymen who work and live in districts that are outside city and municipal water and sanitary service areas. It is one in a series of condensed or 'potted' textbooks, which, although useful to the professional builder (in this case plumber or sanitary engineer), has clearly been written as a 'teach yourself' guide and a reference book for ambitious amateurs.

Mr. Anderson's text is, however, eminently readable and contains information on practically every phase of water supply from the location of sources of supply to free flow at the faucet. The book covers well construction, pump selection and control, maintenance, water softening, sewage disposal and drainage, and all associated plumbing. There are several chapters on various methods of water heating. The author does not reach beyond the scope of domestic installation and his recommendations should adequately supplement local requirements.

A good deal of the terminology and the techniques described undoubtedly conform with current American practice, but there is much of value for the English reader. The text is profusely illustrated with remarkably good line drawings and there are some useful data tables. There is no doubt that Mr. Anderson is a master of his subject and he has the advantage over many of his contemporaries of being easy to understand. AD

Building in Switzerland

Impressions of an Eastern Counties Tour

Members of the Eastern Federation of Building Trades Employers recently paid a visit to Switzerland. Some impressions of Swiss building work are given in this article by the Director, Mr. Robert W. Porter, MBE, FCIS, FSAA

ALTHOUGH A FORTNIGHT'S VISIT to Switzerland could give only a brief impression of the building industry there, enough was seen to make one realise that, in Switzerland as in Britain, the demands on the industry are at present taxing its resources to the utmost.

Figures provided by the Swiss Building Employers' Federation, who warmly welcomed us and arranged some interesting visits to building sites in Zurich, show that in 1961 the anticipated value of constructional work of all kinds will be more than 25 per cent above the level of last year; architects have been complaining in consequence that on occasion they find it difficult to get enough tenders. Labour is so short that over 200,000 foreign workers (mainly from Italy and often unskilled) are working in Swiss industry. Coming on work-permits for the summer months, these workmen often return year by year. In some cantons in fact there are more foreign than Swiss building workers. Apprentices are difficult to recruit because of the attractions of other industries.

Economic Situation Controlled

Although costs are rising, statistics show that the situation is controlled. Since 1939 the cost of living has not quite doubled, building wages are more than twice as high but housebuilding costs, for example, show only a slightly smaller increase. With basic hourly rates of 6s. 8d. for craftsmen and 5s. 4d. for labourers, working a minimum of 46 hours per week, the average weekly pay for building workers, allowing for overtime and bonus, is high. Bearing in mind the level of prices generally and the fact that Switzerland has one of the highest living standards in the world, the relative status of the building worker seems reasonably comparable with ours.

The housebuilder members of our party took a less gloomy view of life when they heard that if housebuilding land could be found in the suburbs it was likely to cost £1 per sq. ft. In the Bahnhofstrasse, the main shopping centre, land would cost £200 per sq. ft. Planning follows a very democratic course; for public projects, details are sent to all citizens in Zurich, who can then vote according to their views. In private housebuilding the applicant must have a profile of the house set out, a period of 4 weeks being given for objectors to state their case.

High Standards and Conservative Designs

Two full days in Zurich devoted to visits of a fair cross-section of building work left us with an impression of good solid building with few exciting designs. We saw no striking innovations in the use of new materials but the workmanship was good and in some cases of a very high standard.

A new technical college for mechanical engineering apprentices (part of the Kunstgewerben Museum in Zurich) was particularly noteworthy for the excellence of its hardwood joinery, plumbing, aluminium window frames, and general laboratory equipment. Apprentices are required to attend for two half-days per week for the four years of their apprenticeship, and in Switzerland as elsewhere accommodation is lagging behind educational requirements. The cost per place of this fine college for 800 day-time students is likely to exceed £1,000.

The heavy expenditure on education was evident on all sides, a striking example being the Freudenberg Grammar School in Zurich where exposed concrete (very much the vogue in Switzerland) linked with bold design made this one of the outstanding buildings we visited. Accommodating 1,000 pupils, this school, completed in 1959, cost over £2m. (It was illustrated in 'The Builder' of June 30 in an article by Dr. Ulrich Trüb on 'The Use of Exposed Concrete in Switzerland'.) The display of the natural surface texture of concrete as a design feature showing the joints of the formwork and the graining of the wood was common in many of the buildings we visited although the concrete work was of a high quality with the surface reasonably free from blemish. However, to our eyes this gave buildings a rather 'unfinished' look which we felt would not be popular in Britain.

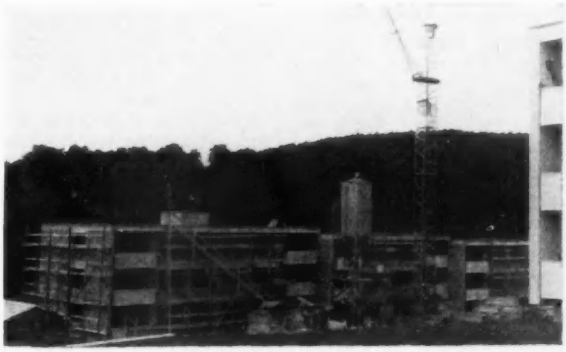
Office and Industrial Building

To the many fine office blocks in Zurich more are being added annually, and we had the opportunity of visiting three very interesting projects in the centre of the city. With the level of the Lake of Zurich only six feet below the ground level of the new Zurich Cantonal Bank Building in the Bahnhofstrasse, special arrangements had to be made to seal off the site which will have three storeys (two for garages and one for archives) below street level. Pile driving was prohibited because of noise, so 163 60 ft. reinforced concrete columns (3 ft. in diameter) were constructed and anchored by precast concrete ties round the perimeter of the site. The foundations, 40 ft. below ground, were waterproofed with three courses of felt and asphalt. This project, to be built in two stages, will cost £3½m., phase one with an area of 6,800 sq. ft. to be completed over a period of two years; phase two, 13,500 sq. ft., to follow once the adjoining building is demolished. This reinforced concrete framed five-storey block will rise to a height of 70 ft., two large tower

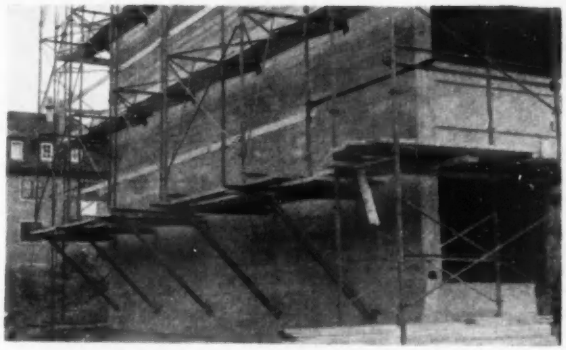
Prefabricated semi-luxury flats, Zolikon

Zolikerberg Protestant Church, Zurich (photos: W. Bruckner)

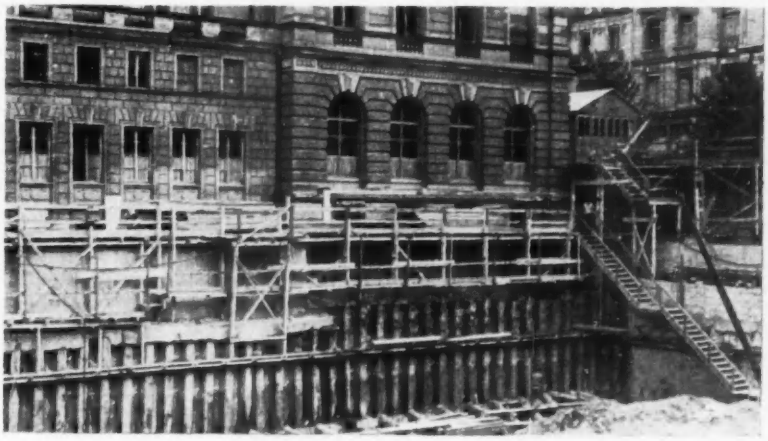
Swiss Accident Insurance Building, Zurich (photos on this page: J. Durston)



Above: Middle-class flats in course of erection, Witikon, Zurich. Below: Scaffolding—Swiss style; the exception rather than the rule, however



Below: Foundations for the Zurich Cantonal Bank building. Left: New Zurich Technical College for mechanical engineering apprentices



cranes being sited so as to cover the whole site.

Another aspect of the water problem, with the ever-present need for wellpoint dewatering, was evident on the site of the new Administrative Offices for the Swiss Accident Insurance Corporation. Here the stores and site offices were on platforms over one of the waterways because of limited working space. Another reinforced concrete framed building with foundations 30 ft. below water level, this five-storey block, 330 ft. by 66 ft. in area, will take two years to complete at a cost of £1m.

An Exciting Project

A more exciting project of advanced design is the office block ('Zur Palme') with the same system for sealing off the site as the Zurich Cantonal Bank. Two basement floors and two main floors for shops will be surmounted by cantilevered parking space for 200 cars. Above this will be eleven floors of offices. The structure will rest on eight central columns each with six linked reinforced concrete piles with a load bearing capacity of up to 350 tons apiece. This 165 ft. high structure will cover an area 205 ft. by 150 ft. When we visited the site, work was proceeding on the first floor and the twin ramps for access to the car park. Although basically in reinforced concrete, the frame above sixth floor level will be in prestressed concrete. The tower crane on this site was stated to be the largest in Switzerland, its 140 ft. jib having a lifting capacity of 1½ tons.

A Novel System of Contracting

In a visit to the Regensdorf factory area some six miles from the centre of Zurich we spent an interesting afternoon inspecting the new Gretag electronics factory. The architect in charge, M. Romanowsky, of Suter & Suter, of Basle, explained fully not only the method of construction, but also the system of contracting. Solidly built in reinforced concrete which we were told was 20 per cent. cheaper than steel, with a 50 ft. roof span and all installations as far as possible located in the ceiling, the factory (which would initially accommodate 180 operatives) was designed with expansion and readjustment in mind. Together with the three-storey office block this project would cost over £½m. and as far as one could ascertain costs were running out at 15s. per ft. cube.

On a selective tendering basis (four firms invited) the main contract had been let separately for foundations and the concrete frame. There would be direct contracts for the finishing and specialist trades. An inspection of the drawings underlined the architect's statement that up to 18 months had been devoted to preparing the scheme in detail.

Housing

The outstanding impression of the several housing projects we visited was that accommodation was expensive and in Switzerland, as elsewhere on the Continent, a quarter of one's income for housing was not considered unreasonable.

All new accommodation in Zurich is for letting, and we were told that at the present time no houses for sale were being erected in the city. Although many flats are being built without subsidy, interest rates on loans from banks, insurance companies, etc., are in the region of 3½ per cent. Quite a few projects are at present being built as an investment by building firms.

Several current developments were of special structural interest. In the Nordstrasse an eight-storey block of flats for the Zurich City Council was being constructed in precast concrete elements, one storey high, placed in position by the ubiquitous tower crane. These flats, 260 sq. ft. in area, comprising a lounge, bedroom, bathroom, and kitchen, will be let at £7 10s. per month, inclusive of heating.

A Tall Brick Building

Unique in their way were the 18-storey flats at Hirzenbach, constructed in brick, after careful research. Once work was under way each floor took five days to construct. One of the several blocks in this new suburb is owned by two building trade unions, the rest by private firms or public companies. A visit to one of these flats, occupied some time ago, proved very interesting. A living room of 200 sq. ft. and two bedrooms (110 sq. ft. and 180 sq. ft.) together with a kitchen, bathroom, etc., cost over £20 per month including heating. The window space in the bedrooms seemed to be inadequate and a small balcony, cramped and windswept, added little to the amenities of the occupiers.

A more attractive, although more expensive proposition, were the pleasantly sited flats at Hasenbart in the district of Witikon, a well-wooded area overlooking the city. These flats (large lounge, 2 bedrooms, etc.) were 1,200 sq. ft. in area and of superior construction and finish. At a rent of £30 per month (including underfloor heating) they were a relatively better proposition than the 18-storey flats at Hirzenbach.

Departing from the standard type of construction were the prefabricated semi-luxury flats at Riedholz in Zolikon, a few miles from the centre of Zurich. The first phase of this development of 3- to 6-storey blocks will cost over £1m. The prefabricated slabs in 24 types are made in Berne, this being the first experiment with this form of construction in Eastern Switzerland. With an inner and outer skin of approximately 4 in. and 6 in. respectively, these reinforced concrete slabs have an insulating expanded polystyrene filling. To the advantages of dry construction is allied an excellent finish and on the first scheme the architect (Mr. Hubacher) estimates a saving of 5 per cent over traditional methods. A finished flat of 1,700 sq. ft. which we inspected, would shortly be let at an inclusive rent of £40 per month.

A Warm Welcome

We were warmly welcomed wherever we went, and we appreciated the courtesy of the arrangements made for our visits where architects, engineers, and contractors were present to show us round and answer our questions. Swiss building and architecture, we felt, was very much a reflection of Swiss life—well mannered and disciplined, abhorring anything shoddy or meretricious. The serious and hardworking citizens of Zurich have certainly reason to be proud of their city and its buildings—both old and new.

ROBERT W. PORTER.

Town Planning Decisions

Guildford's First 10-storey Flats Approved

TWO OUTLINE applications by Guildford Town Council to build the borough's first 'skyscrapers'—two blocks of flats on The Mount and Bishops Croft, Mount Pleasant—have been approved by the Minister of Housing and Local Government. They will, however, have to be one storey less than the Council planned to prevent any risk of spoiling the view of The Mount from the High-street.

The original application was to build two 11-storey blocks of 40 one-bedroomed flats with four penthouses in each, but there were objections to this proposal.

In his report, which has taken six months to come through, the Inspector (Mr. W. A. Devereaux, FRIBA) points out that although the applications relate only to two blocks, the intention is ultimately to develop the triangle bounded by The Mount, Portsmouth-road, and Mount Pleasant. (Surrey County Council supported the Town Council in their application on the condition that it was the first stage in the progressive development of the area as a whole to a comprehensive plan and to a higher density.)

The alternatives appeared to be either to cover the whole area with three to four-storey flats with little open space, or to develop it with high blocks in an open setting, with some contrasting lower blocks.

Owing to its steepness, the triangular area as a whole is a difficult one to lay out, says Mr. Devereaux, and he feels that in the final scheme further consideration should be given to the layout, especially the siting of garages and vehicle entrances from The Mount, of which he considers far too many are proposed. He suggests there should be no access to Mount Pleasant, which is a narrow street carrying fairly heavy traffic.

The Inspector agrees that occupants of houses in Mount Pleasant will suffer some loss of amenity, but says it is improbable that the loss would be very much greater than if the whole area were developed with three to four-storey blocks especially if as many trees as possible are preserved to help screen the upper block from the existing old houses.

Regarding the breaking of the skyline behind the blocks, the Inspector says this is unlikely from the top of the High-street, but there was a danger of this from lower down. This is why he recommends the conditions that the blocks must not be more than 10 storeys, and that the number of flats should be reduced to 40 in each block.

The Minister's Comments

The Minister was in broad agreement with the Inspector's findings and has accepted his recommendation to approve the two outline applications. He is doubtful, however, whether the area could take a third block without detriment to the view of The Mount from the High-street. This comment is made without prejudice to any issue which may come before him in the future regarding development in the area.

Green Belt Residential Scheme Rejected

AN APPEAL by Mr. George Garland, a building contractor, against the refusal of Nidderdale RDC, acting on behalf of the Yorkshire (West Riding) County Council, to grant planning permission for the erection of 25 houses or bungalows, and garages, on land off Main-street, Nether Poppleton, has been dismissed by the Minister of Housing and Local Government. The Minister's decision was arrived at on the ground that the proposed development would encroach on the green belt which, in view of its narrowness on the western side of the City of York, should be preserved intact.

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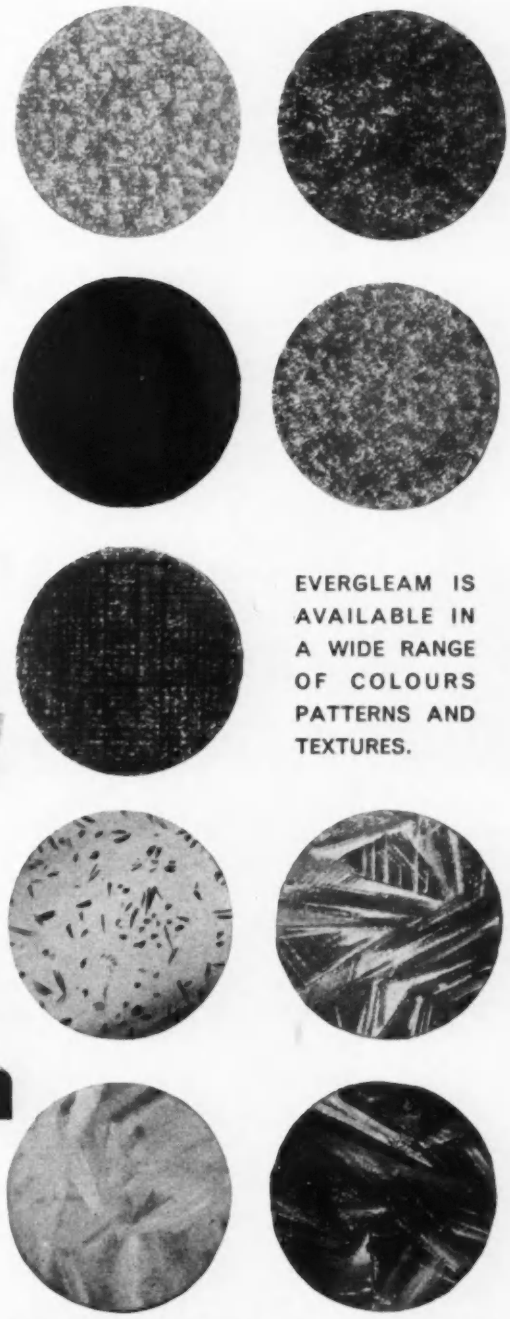

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British Standards

Wastes for Sanitary Appliances ; Back Boilers for Solid Fuel ; Pigments for Cement, etc. ; Internal Combustion Engines ; Forks, Shovels and Spades

Wastes for Sanitary Appliances and Overflows for Baths
Part 1: Wastes (Excluding Skeleton Sink Wastes) and Bath Overflows (BS 3380 : 1961)

THIS LONG-AWAITED STANDARD deals in detail with the group of components used to link sanitary appliances with the traps fitted to waste pipes. This group comprises seven components—waste body, backnut, waste plug, plug chain, chain stay, straight tail pipe ('lining') and coupling nut ('cap'). Also dealt with are four bath overflow fittings—the bath overflow body and its front grid, and the bent tail pipe ('bent lining') and coupling nut ('cap') for connecting the overflow pipe to the bath trap. Each component is defined and fully dimensioned and all except the chain and stay are illustrated. A strength test for the assembly which comprises waste plug, plug chain and chain stay is given.

The standard (price 8s. 6d.) covers components suitable for use with copper, brass, lead, ferrous and plastics traps. For that reason the section on wastes has been omitted from the new edition of BS 1184, to be published shortly. A feature of BS 3380 is that every size and pattern of the components covered (except chain and stay) has been given a BS type reference number to facilitate referencing, particularly on drawings. For example, in future it will be possible to refer to a 1½ in. nominal bore, 3½ in. long waste body with overflow slots and a flange diameter of 2⅞ in. simply by quoting '16S.' Another aid to orderly marketing introduced in this British Standard is the 'Ordering Note' which lists those variable features of the components where the intending purchaser needs to be specific when placing an order.

Part 2 of BS 3380 is nearly ready for publication and will deal with skeleton sink wastes.

Back Boilers for Use with Domestic Solid Fuel Appliances (BS 3377 : 1961)

MATERIALS and constructional requirements for back boilers for use with domestic solid fuel appliances are laid down in this new British Standard (price 3s). Boilers for independent domestic hot water supply or central heating are not dealt with, as they are already covered by other British Standards.

Pigments for Cement, Magnesium Oxychloride and Concrete (BS 1014 : 1961)

THE 1942 EDITION of BS1014—the British Standard for pigments for colouring cement, magnesium oxychloride and concrete—has been replaced by a new- up-to-date edition, price 7s. 6d.

Specifications for mineral black, titanium oxide and zinc sulphide pigments have been added; the specification for chromium hydroxide pigments has been omitted. Testing procedures now include methods of test for matter volatile at 98-102°C, for weight loss at 915-935°C and for matter soluble in ether, and analytical methods for determining the main constituent of the respective pigments.

Internal Combustion Engines (Spark Ignition Type) (BS 765 : 1961)

THERE ARE NOW three British Standards for general-purpose internal combustion engines: BS 649—Diesel engines; BS 3109—Gas and dual fuel engines; BS 765—Spark ignition engines. When BS 765 was first published in 1938 it was entitled 'Internal Combustion Engines, Carburettor type.' The carburettor, then universal, is now sometimes replaced by fuel injection, spark ignition being retained. The title and scope of the standard BS 765:1961, price 6s., have accordingly been changed. Instead of basing engine rating on a 12-hour running period, the revised standard introduces the basis of continuous running (limited only by overhaul requirements). In this change the standard is in line with the other two specifications for internal combustion engines. Since BS 765 is intended to cover engines with a wide range of duties, three intermittent ratings are included.

Forks, Shovels and Spades : Part 1 General Purpose Tools (BS 3388 : Part 1)

MUCH has been written in trade journals and in the popular Press about the need for standards for forks, shovels, spades and similar tools. On the user side the demand has largely been for quality requirements to be laid down, whilst manufacturers and stockists have long been perturbed by the tremendous variety of tools being manufactured.

In producing a British Standard for general purpose forks, shovels and spades (BS 3388:Part 1. Price 15s.) the BSI has faced a most difficult task, largely because the industry has grown over several centuries during which time no limit has been imposed on the number of variations of the basic designs, many of which are slight. Some design preferences are purely regional ones; for example—for reasons now obscure—variations of the Tee type hilt are largely used in the East Midlands, whereas hardly any other than variations of the Dee type are seen in the South East. Obviously, no one can dictate that these varied patterns should not be demanded and produced and the BSI's approach has been to fix a standard preferred range of tools covering all fields of general usage which can be manufactured with considerably greater economy. The stronger design preferences outside the preferred range are recognised, but it is hoped that as the standard is put into practice users will become more and more reluctant to demand their production.

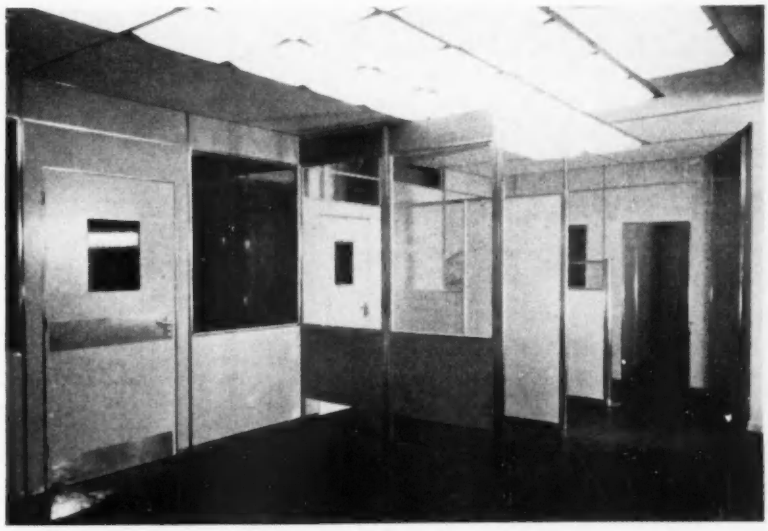
The specification also deals with nomenclature, materials, heat treatment and hardness, manufacture, dimensions, finish and marking. Tests are laid down which ensure that the finished product will withstand rough usage.

Copies of these Standards may be obtained from the British Standards Institution, Sales Branch, 2 Park-street, London, W1.

New Costing Manual

'COSTING FOR THE ESTIMATOR' is the subject of a manual, compiled by Mr. B. P. Davis, which has appeared in serial form in 'The Illustrated Carpenter and Builder.' Section one, dealing with preliminaries and excavator, has now been published separately and is available from Mr. Davis at 156 Pytchley-road, Kettering, Northants.

One of the several Medino partitioning showrooms which have been opened by William Mallinson & Sons Ltd., at 130, Hackney-road, E2, as a centre where architects and others may select partitioning and veneered panelling



THE BUILDER CURRENT PRICES

THE information given on these pages has been specially compiled for *The Builder* and is copyright. It is the intention that the details given should indicate fair average prices of materials, not necessarily the highest or the lowest. The prices apply to large quantities of materials loaded at works, delivered at London Stations or at site in London Area as stated. Prices for smaller quantities ex merchant's warehouse will necessarily be higher so as to include the stocking and handling costs involved. It is recommended that the prices of materials should be confirmed by inquiry from suppliers and merchants.

AGGREGATES AND SAND

Delivered site in full lorry loads. Average of prices for Boroughs of Westminster, Paddington, Holborn and St. Pancras.

		£	s.	d.
Pit Ballast	per yd.	1	5	5
Pit Sand	,,	1	3	8
Washed Sand	,,	1	6	9
¾ in. Shingle	,,	1	4	3
¾ in. Broken Brick	,,	1	0	9
Pan Breeze	,,	1	5	0
Fine or Coarse Foamed Slag Aggregate	per ton	3	8	0

2 yds. of fine and 2.6 yds. of coarse per ton.

CEMENT, etc.

Including non-returnable jute sacks or paper bags.

Best British Portland Cement. Standard Specification delivered Charing Cross area.

		£	s.	d.
8-ton loads and upwards, site	per ton	5	16	0
Below 8 tons down to 4 tons, site	,,	6	8	0
Below 4 tons down to 2 tons, site	,,	6	12	0
Below 2 tons down to 1 ton, site	,,	6	14	0
Rapid-Hardening Cement in 8-ton loads and upwards to site	,,	6	6	6
Below 8 tons down to 4 tons, site	,,	6	18	6
Below 4 tons down to 2 tons, site	,,	7	2	6
Below 2 tons down to 1 ton, site	,,	7	4	0

Aquacrete Water Repellent Cement. 32s. 6d. per ton on ordinary cement prices.

Sulphate Resisting Cement. 32s. 6d. per ton on ordinary cement prices.

Red, Buff or Khaki Colocrete in 8-ton lots	,,	8	16	0

Other colours according to colour.

In 4-ton lots from 313s. 3d. to 783s. 3d. per ton.

White Portland Cement	,,	14	0	9
Under 1 ton	per cwt.		17	0
417 Cement (Ultra Rapid Hardening) in 8-ton lots and upwards	per ton	7	8	6

Super Cement (Waterproof), 32s. 6d. per ton above Portland Cement.

Cullamix Tyrolean Finish, £11 13s.3d. to £14 8s.3d. (1-ton loads and upwards).

Ciment Fondu and Lightning Brands High Aluminous cement, 6-ton lots and up	,,	15	14	6
Stourbridge Fireclay, 6-ton loads at Railway Depot, London	,,	6	19	0
Stourbridge Fireclay, 6-ton loads (London sites)	,,	7	12	0
Moler Mortar Powder for Flue Bricks (London sites)	per cwt.	1	6	0

BRICKS

Full Loads

		£	s.	d.
First Hard Stocks	per 1,000	16	19	6
Second Hard Stocks	,,	14	18	6
Mild Stocks (Kiln Burnt)	,,	11	5	0
Mild Stocks	,,	11	0	0

All loaded free into lorry at the works. The question of haulage is still very difficult and prices must be obtained from job to job.

2½ in. Nominal Fletton Bricks to sites in W.C. district :

Commons	,,	6	12	0
Cellular Commons	,,	6	12	0
Keyed do.	,,	6	14	0
Rustics	,,	8	12	0
Cellular Rustics	,,	8	12	0
Single Bullnose Commons	,,	8	14	6
Sandfaced	,,	9	12	0
Tuscans	,,	10	7	0
Saxons	,,	10	15	0
Golden Buffs	,,	11	2	0
Dapple Light Facings	,,	11	9	6
Heather Facings	,,	11	5	0
Best Blue Pressed Staffs (London sites)	,,	34	0	6
do. Bullnose (London sites)	,,	34	19	6
Blue Wire Cuts (London sites)	,,	29	19	6
Midhurst Lime Bricks (London sites)	,,	11	13	0
Uxbridge Whites (London sites)	,,	12	3	6
Special Purpose Sandlime Bricks (London sites)	,,	9	2	0
Best Stourbridge Fire Bricks :				
2½ in. (London stations)	,,	32	14	0
2½ in. (London sites)	,,	33	2	9
3 in. (London stations)	per 1,000	39	4	6
3 in. (London sites)	,,	39	15	0
2½ in. Moler Flue Bricks (London sites)	,,	31	0	0
2½ in. Machine-made Sandfaced Red Facings (London sites)	,,	18	19	0
2½ in. Machine-made Multi Red Facings (London sites)	,,	19	4	0
2½ in. Hand-made Sandfaced Red Facings (London sites)	,,	20	17	6
2½ in. Hand-made Sandfaced Multi-Colour Facings (London sites)	,,	20	17	6
Hand-made Sandfaced Cherry Red Facings, Berkshire district (London sites)	,,	21	5	0
Hand-made Sandfaced Multi-Colour Facings, Berkshire district (London sites)	,,	21	5	0
Rubber Bricks for gauged arches (London sites)	,,	52	5	0
2½ in. Surrey Clamp Burnt Multi Stock Facings (London sites)	,,	16	15	0
2½ in. Surrey Kiln Burnt Multi Stock Facings (London sites)	,,	18	7	6
Glazed Bricks (London sites), White, Ivory, Brown:				
Stretchers	,,	64	0	0
Headers	,,	63	0	0
Quoins, Bullnose and 4½ in. Flats	,,	80	0	0
Double Stretchers	,,	85	0	0
Double Headers	,,	77	10	0
One side and two ends	,,	87	0	0
Two sides and one end	,,	89	10	0
Splays and Squints	,,	83	0	0

Cream and Buff, £3 extra over White. Other colours, hard glaze, £8 10s. 0d. extra over White. All above prices plus 47½% for Best quality and plus 47½% less 10% for Second quality.

PARTITION SLABS, etc.

Delivered Central London Area. (W.C. District).

			£	s.	d.
Hollow Clay Partition Blocks (Keyed)					
Minimum lorry loads					
*2½ in.	140 yds.	per yd. sup.		4	7
Building Blocks (Keyed)					
*3 in. (6 cavity)	110 yds.	,,		5	9
*4 in. (6 cavity)	90 yds.	,,		7	3
6 in. (8¾ in. × 5¾ in.)	1,250 blocks	per 1,000	28	9	0

* Half blocks at no extra charge.

Clinker Concrete					
2 in.	100 yds.	per yd. sup.		4	0
2½ in.	85 yds.	,,		4	7
3 in.	75 yds.	,,		5	8
4 in.	55 yds.	,,		7	0
Cranham Terra Cotta					
2 in.		,,		7	5
2½ in.		,,		8	4
3 in. Load bearing quality		,,		9	6
4 in. do. do		,,		11	6
Moler Partition Blocks					
2 in.	150 yds.	,,		12	9
2½ in.	120 yds.	,,		13	9
3 in.	100 yds.	,,		14	9
4 in.	90 yds.	,,		17	0
Lightweight Concrete Building and Partition blocks of Various Sources of Manufacture					
2 in.	100 yds.	per yd. sup.		5	4
2½ in.	80 yds.	,,		6	5
3 in.	65 yds.	,,		7	5
4 in.	50 yds.	,,		9	4
4½ in.	44 yds.	,,		10	2
6 in.	33 yds.	,,		14	5
Thermalite-Ytong Partition Blocks					
2½ in.	144 yds.	,,		7	0
Thermalite-Ytong Load-Bearing Insulating Blocks					
3 in.	120 yds.	per yd. sup.		8	5
4 in.	90 yds.	,,		11	0
5 in.	72 yds.	,,		13	9
6 in.	60 yds.	,,		16	6
8½ in.	42 yds.	,,	1	3	8

Floor Blocks and Filler Tiles

Floor Blocks 12 in. × 12 in. delivered in full lorry-loads :

3 in.	per 1,000	35	14	0
4 in.	,,	38	9	0
5 in.	,,	46	1	0
6 in.	,,	52	12	0
7 in.	,,	64	12	0
8 in.	,,	75	9	0
9 in.	,,	83	2	0
10 in.	,,	92	0	0
Filler Tiles in multiples of 10 tiles per 1,000 multiples :				
12 in. × 3 in. × ½ in.	,,	43	13	0
12 in. × 4 in. × ½ in.	,,	75	7	0
10 in. × 5 in. × ½ in.	,,	75	7	0

Ferguson House Marylebone

In April of last year work was completed on Ferguson House on the site formerly occupied by Devonshire Terrace, the one time home of Charles Dickens.

The new office block comprises five storeys and basement and contains nearly 47,000 sq. ft. of office space with a staff restaurant and a car park for 24 vehicles at the rear. The frame is of reinforced concrete and the upper storeys are faced externally in London stock brickwork.

At ground level there are facings of Empire stone and rough-axed granite panels below the windows. The interior of the building, which is heated by a low-pressure radiator system from gas-fired boilers housed on the roof, has exceptionally clean lines. There are no beam projections and all services have been grouped in concealed centralised ducts.

The building was erected for the Laing Development Company Limited by John Laing Construction Limited.

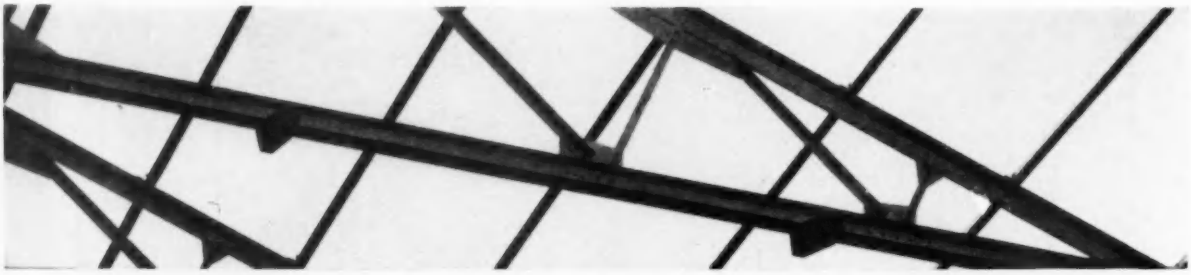
Five storey office block
Architect:
Clifford Culpin,
O.B.E, F.R.I.B.A, M.T.P.I
Consulting Engineer: W. V. Zinn

The sculptured panel at Ferguson House, Marylebone Road, by Estcourt J. Clack, F.R.B.S depicts Charles Dickens with characters from some of his novels

For completion on time

Great Britain and Overseas

LAING



WARDS *for* STEELWORK

THOS. W. WARD LTD · ALBION WORKS · SHEFFIELD · TEL 26311

CS.30

STONEWARE DRAIN PIPES, etc.

Glazed Stoneware Standard List (November, 1956).

		4 in.	6 in.	9 in.
Pipes, 2 ft. lengths	per ft.	1/8	2/6	4/6
Bends	each	5/–	7/6	20/3
Junctions	,,	8/4	12/6	27/–
Gullies with 4 in. outlets	,,	12/6	13/9	22/6

The following are the percentages to be added to the Standard List (November, 1956) prices delivered London Area.
Delivered ex Merchants Wharf or Depot.

	Over 2 tons	Over 100 pieces Under 2 tons	Under 100 pieces Under 2 tons
Best Quality ...	NET	+22½%	+27½%
BSS Best Quality...	+10% NET	+10%+22½%	+10%+27½%
Tested Quality ...	+37½% NET	+37½%+22½%	+37½%+27½%
BSS Tested Quality	+47½% NET	+47½%+22½%	+47½%+27½%

		£	s.	d.
3 in. Land Drain Pipes (in 12 in. lengths)	per 1,000	12	10	6
4 in. do. do.	,,	16	16	0
6 in. do. do.	,,	34	10	0
9 in. do. do.	,,	64	19	0

DAMP COURSE

		£	s.	d.
Hessian base bitumen 7 lb. per yd. sup. in 24 ft. rolls cut to wall widths in lots of £6 value and over delivered London area	per yd. sup.		3	5
Asbestos base do. 7 lb. per yd. sup. do. do.	,,		5	2
Lead lined bitumen do. 9½ lb. per yd. sup. do. do.	,,		12	2
18 in. × 9 in. British damp course slates	per 1,000	43	8	11
14 in. × 9 in. do. do.	,,	32	8	2
9 in. × 9 in. do. do.	,,	18	18	9
18 in. × 4½ in. do. do.	,,	19	19	9
14 in. × 4½ in. do. do.	,,	15	18	3
9 in. × 4½ in. do. do.	,,	10	14	3

STONE

		£	s.	d.
Bath Stone				
Monks Park	per ft. cube		10	3
St. Aldhelm Box Ground	,,		11	6
Delivered in railway trucks at South Lambeth B.R. Western Region.				
Doulting Stone Random Blocks. Delivered London area	,,		10	10
Beer Stone. Delivered London area	,,		10	6
Portland Stone—				
Brown Whitbed in random blocks, 20 ft. average delivered in railway trucks at Nine Elms, B.R. Southern Region	,,		9	10
Yorkshire Stone—Blue Robin Hood Quality. Delivered to site London in 6-ton lots.				
9 in. × 3 in. Rubbed, weathered, throated and stolled cills	per ft. cube	4	5	10
12 in. × 6 in. do. do. do.	,,	3	1	2
12 in. × 3 in. Plain coping, twice throated	,,	2	7	6
12 in × 3 in. Weathered and twice throated coping	,,	3	3	3
14 in. × 6 in. do. do. do.	,,	2	17	0
4½ in. × 9 in. Plinth rubbed on top and face ...	,,	2	11	0
3 in. sawn two sides Slabs, random sizes	per ft. sup.		9	1
Templates and Cover Stones, 3 in., 4 in. and 6 in. thick, edges coped for rendered brickwork ...	per ft. cube	1	11	3
do. do. fair one edge for fair faced brickwork	,,	1	17	0
Hard York—				
12 in. × 2 in. Square Steps, rubbed on top and edge	per ft. run		11	0
14 in. × 3 in. Round-nosed Steps, rubbed on top and front	per ft. cube	2	18	3
12 in. × 6 in. Plain Steps, rubbed top and front	,,	2	11	0
2 in. Rubbed and Jointed Paving, given sizes ...	per ft. sup.		10	3
2 in. Sawn Paving, edges squared, in random sizes	per yd. sup.	3	12	0

TILES AND PANTILES

Delivered London area by road in 6 tons or over per 1,000.

	£	s.	d.
Machine-made Pantiles and French pattern Tiles from Lincolnshire district	35	16	6
Hand-made Pantiles Berkshire district	64	10	0
Hand-made Double Roman Bridgwater district	78	2	9
Hand-made 10½ × 6½ tiles Berkshire district	18	0	0
Machine-made 10½ × 6½ Staffordshire district	17	0	0
Hand-made Hip and Valley tiles per doz.	1	13	0
Machine-made Hip and Valley tiles do.	1	12	0
Concrete tiles 10½ × 6½	8	10	0
do. Interlocking (49S)	19	16	6

NOTE.—Breakage in transit, purchasers' responsibility.

SLATES

First-quality Slates from Penrhyn or Portmadoc, carriage paid in full truck loads to London Rate station. Per 1,000 actual.

	£	s.	d.
24 × 12	160	4	0
22 × 12	126	15	0
22 × 11	114	15	0
20 × 12	107	5	0
20 × 10	105	0	0
18 × 10	71	5	0
18 × 9	62	14	0
16 × 10	54	15	0
16 × 8	42	18	0

NOTE.—Breakage in transit, purchasers' responsibility.

TIMBER

				£	s.	d.
Softwood		Ex Wharf	per standard	£115 to £140		
Joinery quality		do.	,,	£94 — £98		
Carcassing quality		do.	,,	£112	0	0
1 in. Tongued and Grooved Flooring		do.	,,			
Hardwood				£	s.	d.
Mahogany—	African S.E.	do.	per ft. cube	1	10	0
do.	Honduras S.E.	do.	,,	3	5	0
Oak	European S.E.	do.	,,	2	10	0
do.	Japanese S.E.	do.	,,	3	0	0
do.	English Logs sawn ...	do.	,,	2	0	0
Teak	8 in. average S.E. ...	do.	,,	3	17	6
Walnut	African Logs sawn ...	do.	,,	1	2	6
Plywood			per			
6 mm. (¼ in.) Birch Plywood B/BB			100 sq. ft.	4	4	3
6 mm. Israeli Gaboon do. B/BB exterior grade WBP (AX100)			,,	4	5	3
18 mm. Birch Blockboard			,,	9	8	0
¾ in. Douglas Fir Plywood 96 in. × 48 in. Exterior grade WPB (AX100) solid two sides			,,	9	3	0

DOORS (in Lots 1-11)

Delivered London area.

		£	s.	d.
1½ in. 4 Horizontal Panel. Pattern 4 in. deal				
2 ft. 0 in. × 6 ft. 6 in.	each	1	16	0
2 ft. 3 in. × 6 ft. 6 in.	,,	1	17	6
2 ft. 6 in. × 6 ft. 6 in.	,,	1	18	6
2 ft. 9 in. × 6 ft. 6 in.	,,	2	0	6
2 in. do. but top panel open. Pattern 4 × G in deal				
2 ft. 6 in. × 6 ft. 6 in.	,,	2	9	0
2 ft. 9 in. × 6 ft. 6 in.	,,	2	11	6
2 in. 2 Panel top panel open. Pattern 2 × G in deal				
2 ft. 6 in. × 6 ft. 6 in.	,,	2	3	0
2 ft. 9 in. × 6 ft. 6 in.	,,	2	5	0
1⅜ in. Plywood Faced Flush Doors to BS459, Part 2A				
2 ft. 0 in. × 6 ft. 0 in.	,,	1	12	3
2 ft. 0 in. × 6 ft. 6 in.	,,	1	12	3
2 ft. 3 in. × 6 ft. 6 in.	,,	1	13	9
2 ft. 6 in. × 6 ft. 6 in.	,,	1	15	3
2 ft. 9 in. × 6 ft. 6 in.	,,	1	18	0
1½ in. Hardboard Faced Flush Doors				
2 ft. 0 in. × 6 ft. 0 in.	,,	1	5	6
2 ft. 0 in. × 6 ft. 6 in.	,,	1	6	0
2 ft. 3 in. × 6 ft. 6 in.	,,	1	6	6
2 ft. 6 in. × 6 ft. 6 in.	,,	1	8	6
2 ft. 9 in. × 6 ft. 6 in.	,,	1	9	6

SUNDRIES

Delivered London area.

		£	s.	d.
1 in. Wood Wool Slabs 6 ft. 0 in. × 2 ft. 0 in. in quantities of 1 ton (89 yds. to 1 ton)	per yd.		6	2
1½ in. do. (67 yds. to 1 ton)	,,		8	0
2 in. do. (52 yds. to 1 ton)	,,		9	9½
2½ in. do. (45 yds. to 1 ton)	,,		11	3
3 in. do. (39 yds. to 1 ton)	,,		12	7½
⅛ in. imported or home produced insulation Board, quantities over 5,000 sq. ft.	per 100 sq. ft.	2	2	6
⅛ in. Hardboard do.	,,	1	17	6
5/16 in. do. do.	,,	2	4	6
2 in. Compressed Straw Slabs, roofing quality. 6 ft., 8 ft., 9 ft., 10 ft., and 12 ft. × 4 ft.				
50–100 yds.	per yd. sup.		11	4
101–250 yds.	,,		10	10
251–750 yds.	,,		10	1
Over 750 yds.	,,		9	4
2 in. do. for partitions 4d. per yd. cheaper.				
5/16 in. Asbestos Flat Building Sheets...	,,		4	3½
¼ in. do. do. do.	,,		6	0
Roofing Felt 1-ply	,,		1	9
do. 2-ply	,,		2	2½
Best Scotch Glue in slabs	per ½ cwt.	5	3	9
do. pearl	,,	5	3	9
Croid Glue	28 lb.	2	6	0
Impact Adhesive	per gall.	2	12	0
Cut Nails 3 in. (1-ton lots)	per ton	84	10	0
do. 4 in. and up (1-ton lots)	,,	81	0	0
Wire Nails 3 in. (4-cwt. lots)	per cwt.	4	2	1
do. 4 in. and up (4-cwt. lots)	,,	3	19	3

METALS

STEEL JOIST, ETC.

		£	s.	d.
Basis Joists— 6 in. × 5 in., 8 in. × 5 in., 8 in. × 6 in., 10 in. × 6 in., 12 in. × 6 in., plain cut to lengths delivered London area	per ton	47	15	0
Extra for sizes				
3 in. × 1½ in. 4 in. × 1⅝ in.	,,	3	10	0
3 in. × 3 in.	,,	2	10	0
4 in. × 3 in.	,,	2	5	0
10 in. × 4½ in.	,,	1	10	0
5 in. × 2½ in. 5 in. × 3 in.	,,	1	15	0
4⅞ in. × 1⅞ in.	,,	3	5	0
5 in. × 4½ in. 7 in. × 3½ in. 13 in. × 5 in. ...	,,		15	0
6 in. × 3 in. 24 in. × 7½ in.	,,	2	0	0
6 in. × 4½ in. 7 in. × 4 in. 8 in. × 4 in. 9 in. × 4 in. 10 in. × 5 in.	,,	1	5	0
12 in. × 5 in. 22 in. × 7 in.	,,	1	0	0

METALS—*continued*

			£	s.	d.
9 in. × 7 in. / 10 in. × 8 in. / 12 in. × 8 in.	per ton			10	0
14 in. × 5½ in. / 14 in. × 6 in. / 14 in. × 8 in.	per ton			10	0
15 in. × 5 in. / 15 in. × 6 in. / 16 in. × 6 in.	per ton			10	0
16 in. × 8 in. / 18 in. × 6 in. / 18 in. × 7 in.	per ton			10	0
18 in. × 8 in. / 20 in. × 6½ in. / 20 in. × 7½ in.	per ton			10	0
Steel angles average price	,,		48	15	0
Steel tees average price	,,		49	15	0
Fabricated work delivered London—					
R.S. Joists cut and fitted...	,,		67	19	0
Compound girders	,,		72	14	3
Stanchions	,,		78	9	9
Compound stanchions	,,		83	4	3
In Roof Work—Trusses and Purlins	,,		93	19	6
Average prices not for awkward work.					
Angle cleats and ½ in., ¾ in. and ⅞ in. bolts average price London area	per cwt.		5	10	0
Above prices joists etc. increased by 1·1%.					

Ferro-Concrete Bars and Fabric

Mild Steel Ferro-Concrete Bars British manufacture to BSS 785 ex. Mills. 1 in. diameter and upwards delivered nearest London station ...	per ton	40	10	0
do. do. ex. London Stock do. delivered London site	,,	49	10	0
Extras—				
¾ in. diam....	per ton extra	8	12	6
7/16 in. do.	,,	6	12	6
½ in. do.	,,	4	12	6
⅜ in. do.	,,	3	2	6
¼ in. do.	,,	1	10	0
⅛ in. and ⅞ in. diam.	,,		15	0
Above prices mild steel bars increased by 1·1%.				
Steel wire mesh reinforcing fabric to BSS 1221A.				
Ref. No. 106 ... ... 7.88 lbs.	per sq. yd.		5	2¾
,, ,, 109 ... ... 4.71 ,, ...	,,		3	0¼
,, ,, 113 ... ... 1.83 ,, ...	,,		1	8½
,, ,, 122 ... ... 7.32 ,, ...	,,		4	10½
,, ,, 125 ... ... 4.32 ,, ...	,,		2	10½

Mild Steel Tubes

Tubes to BSS 1387. Fittings BSS 1740.

Basic List Prices

		¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Tubes	per ft.	9¾	10	1/–	1/2½	1/9	2/3	2/8	3/9
Bends	each	1/7	1/9	2/–	2/6	3/8	5/5	6/2	10/7
Elbows, square	,,	1/8	1/10	2/2	2/6	3/–	4/4	5/2	8/6
do. round	,,	1/10	2/–	2/4	2/10	3/4	4/8	5/8	9/4
Tees	,,	2/–	2/2	2/6	3/2	3/8	5/–	6/2	10/2
Crosses... ...	,,	4/4	4/8	5/6	6/6	8/2	11/–	13/2	21/–
Sockets, Plain	,,	6	6	8	10	1/–	1/4	1/9	2/6
do. Diminished	,,	8	10	1/–	1/2	1/6	2/–	2/8	4/–
Backnuts ...	,,	4	4	6	7	10	1/–	1/4	2/2

Malleable Fittings

		¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Elbows, round	each	8½	8½	9½	1/2½	1/8½	2/7½	3/6	5/–
Tees	,,	9½	9½	1/–	1/4¾	2/–	2/9½	4/–	5/6
Crosses... ...	,,	1/2½	1/2½	1/4¾	2/–	2/9½	3/7½	5/2½	7/2½
Sockets... ...	,,	5¾	5¾	7	9¼	1/–	1/7¾	2/2½	3/1¼
Backnuts ...	,,	3	3	3¼	4¼	5¾	7¾	10¼	1/5¼

Discounts from List prices as follows :—

Galvanised Tube—	Under 1 ton	Over 1 ton	W.I. Fittings	Malleable Fittings
Light	−37 %	−38¾%	Light −24½%	Malleable List
Medium	−33 %	−34¾%	Heavy −20¾%	−14%+40%
Heavy	−25¼%	−27 %		
Black—				
Light	−47 %	−48¾%	Light −30½%	Malleable List
Medium	−43 %	−44¾%	Heavy −26¾%	−14%
Heavy	−35¼%	−37 %		

C.I. Half-Round Gutters

Delivered London per yd. in 6 ft. lengths.

	Gutters	Nozzles	Stop Ends
3 in.	4/4½	3/10	1/1
3½ in.	4/9	4/2	1/1
4 in.	6/1½	4/9	1/8
4½ in.	6/9	5/4	2/–
5 in.	7/6	5/9	2/4

C.I.O.G. Gutters

Per yd. in 6 ft. lengths :	Gutters	Nozzles	Stop Ends
3 in.	5/7½	5/1	1/4
3½ in.	6/3½	5/1	1/8
4 in.	6/11½	5/4	2/–
4½ in.	7/6	6/1	2/4
5 in.	8/2½	7/–	2/8

C.I. Rain-Water Pipes

	Pipes	Bends	Branches
2 in.	9/4	4/9	6/10
2½ in.	9/4	5/4	9/2
3 in.	10/6	6/8	9/11
3½ in.	11/10	7/10	11/11
4 in.	13/9½	9/6	14/2

L.C.C. Coated Soil Pipes

2 in.	10/7	8/2	9/11
2½ in.	11/2	9/1	12/4
3 in.	12/6½	9/11	14/8
3½ in.	14/–½	12/4	17/1
4 in.	15/11½	13/10	20/3

Above prices for gutters, rain-water and soil pipes for under 5-cwt. lots only. Lots over 5 cwt. see List No. 3300, dated February 1, 1955, plus 32½% and tonnage allowance. 4-ton lots 5%, 2-ton lots 2½%.

L.C.C. Coated Drain Pipes

		£	s.	d.
4 in. diameter in 9 ft. lengths	per yd. run	1	11	1
6 in. do. do.	,,	2	5	6
4 in. diameter bends	each	1	0	6
6 in. do. do.	,,	2	14	9
4 in. diameter branches	,,	1	16	6
6 in. do. do.	,,	4	7	6
Above prices for any quantity but under 5 cwt. carriage extra.				

Pitch Fibre Drain Pipes

2 in. diameter in 5 ft., 5 ft. 6 in. or 8 ft. lengths including couplings	per ft. run		1	6½
3 in. do.	,,		1	10¾
4 in. do.	,,		2	6
5 in. do.	,,		4	1¾
6 in. do.	,,		5	0¾
4 in. diameter short radius ¼ bends	each		17	9
4 in. do. do. ⅛ bends	,,		12	11
2 in. diameter 6 ft. radius bends (5 ft. lengths)	,,		17	0
3 in. do. do. do.	,,		19	8
4 in. do. do. do.	,,	1	7	4
5 in. do. do. do.	,,	2	4	0
6 in. do. do. do.	,,	2	14	6
Above prices for loads of £60 and over.				
Loads £25 to £59 19s. 11d. Plus 10%				
Loads under £25 ... Plus 15%				

Asbestos Rain-Water Pipes and Fittings

All less 17½% discount.		2 in.	2½ in.	3 in.	4 in.
Pipes, 6 ft. lengths	per yd.	4/7	4/10½	5/11	7/10
Shoes	each	3/–	3/3	3/10	5/2
Single Branches	,,	4/8	5/6	6/7	9/2
Bends, squares or obtuse ...	,,	3/3	3/7	4/8	6/7
Swan Necks, 4½ in. proj....	,,	3/7	4/8	5/2	7/3
do. 6 in. do. ...	,,	3/10	5/2	5/10	7/10

Asbestos O.G. Gutters and Fittings

		4 in.	4½ in.	5 in.	6 in.
Gutters, 6 ft. lengths ...	per yd.	4/4	4/9½	5/9	6/10½
Drop ends	each	3/6	4/–	4/9	5/5
Stop ends	,,	1/1	1/2	1/3	1/5
Angles	,,	3/7	4/1	5/–	5/10
Nozzles	,,	3/6	4/–	4/9	5/–
Union Clips	,,	1/9	2/1	2/6	2/11

Asbestos Half-Round Gutters and Fittings

	per	3 in.	4 in.	4½ in.	5 in.	6 in.
Gutters, 6 ft. lengths	yd.	3/0½	3/7½	3/8½	4/4½	6/1
Drop ends	each	2/6	3/–	3/3	3/7	5/2
Stop ends	,,	1/–	1/1	1/2	1/3	1/5
Angles	,,	2/10	3/3	3/7	3/10	5/2
Nozzles	,,	2/6	3/–	3/3	3/7	5/2
Union Clips	,,	1/3	1/4	1/5	1/7	2/5

	Per ton basis in London £	s.	d.
Iron—Staffordshire Crown Merchant Quality	52	17	6
Mild Steel Bars	47	18	0
Mild Steel Hoops	49	10	0
	Ex Merchant's Stock per ton Two-ton lots £	s.	d.
Soft Sheets C.R. and C.A.—			
20 gauge	63	0	0
24 gauge	65	10	6
26 gauge	68	11	0
Galvanised Corruguated Sheets, 6-ft. to 9-ft.—			
20 gauge	70	18	0
24 gauge	74	9	0
26 gauge	79	15	0
Galvanised Flat Sheets C.R. and C.A.—			
20 gauge	72	8	6
24 gauge	75	19	0
26 gauge	81	5	0

ALUMINIUM AND ALUMINIUM ALLOYS

(Base Prices)		£	s.	d.
Sheet BS 1740 S1C 18 SWG (36 in. wide)... ...	per lb.		3	0½
Sheet BS 1470 NS3 Utility 18 SWG (36 in. wide)	,,		2	11½
Coiled strip BS 1470 S1C 18 SWG (24 in. wide)	,,		2	11½
Coiled strip BS 1470 NS3 Utility 18 SWG (24 in. wide)...	,,		2	11
Coiled strip high purity, 22 SWG (12 in. wide)	,,		3	2
Corrugated sheet BS 1470 NS3 Circular Profile 8 ft. × 32 in. × 20 SWG	per sheet	1	14	1
Corrugated sheet BS 1470 NS3 Industrial Profile 8 ft. × 31¾ in. × 20 SWG	,,	1	19	10
Corrugated sheet BS 1470 NS3 Mansard Profile 8 ft. × 31¾ in. × 20 SWG	,,	1	13	1
Extruded section BS 1476 E1C simple moulding	per lb.		2	10½
Extruded section BS 1476 E1C 1 in. diam. round	,,		2	8
Extruded section BS 1476 HE19WP simple angle	,,		3	2
Extruded section BS 1476 HE19WP 1 in. diam. round	,,		3	1
Tubing BS 1471 T1C 1½ in. O/D × 20 SWG ...	,,		4	8
Tubing BS 1471 HT19WP 1½ in. O/D × 20 SWG	,,		6	3

PLUMBERS' BRASS WORK, etc.

Delivered in London area.

All per dozen	B.S.S. ½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Screwdown bib cocks Crutch head for iron...	87/–	128/–	—	—	—	—
Toilet bib cocks for iron ...	109/–	158/5	—	—	—	—

higher security at low cost

WITH THE YALE 3-LEVER RANGE

Higher security . . . at lower-than-ever cost! That's what you get with the Yale range of 3-lever locks . . . a truly complete range to cover every possible requirement for a mortice lock.

WIDE RANGE OF DIFFERS

- 144 Differs off levers only (standard)
- 350 Differs off levers (if required)
- 3,500 Differs (with wards)

General Specification

Follower holes brass bushed; Forend—armoured brass upper and steel lower; Deadlock bolts reinforced with hardend steel pins; Case: steel, enamelled grey. Bolt heads: brass. Can be master keyed in suites and sub-suites.

Styled for today

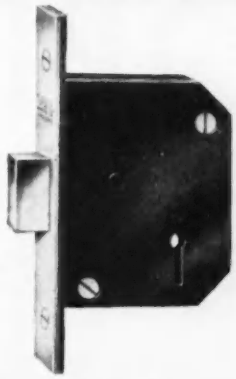
The complete range of Yale 3-lever mortice locks, together with the key, have been accepted by the Council of Industrial Design for the 'Design Index'.

Literature

Your local merchant will be pleased to show you this new range of locks, and let you have a fully illustrated booklet.

Where there's a door there's a need for

YALE
REGISTERED TRADE MARK

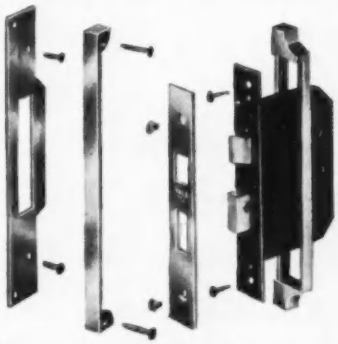


Wide Range of types

The wide range of Yale 3-lever Mortice locks includes Upright Mortice Deadlocks 2½" & 3", Horizontal Mortice Locks 5" & 6", Upright Mortice Locks 2½" & 3", and a Sliding Door locking latch.

Nylon Covered Key

The light, attractively styled key is nickel plated. Nylon-covered shank gives durability—self-lubrication at point of contact with lock.



The Yale Reversible Rebated Forend Set

This set enables Yale 3-lever Mortice Locks and all other standard Yale plain forend mortice locks to be converted into fully rebated locks. The set is completely reversible for left or right hand, inward or outward opening doors.

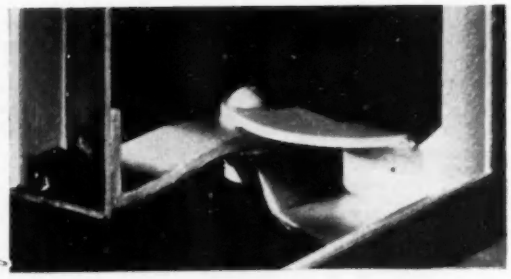
THE **YALE & TOWNE** MANUFACTURING CO · BRITISH LOCK AND HARDWARE DIVISION · DEPT. C9 · WILLENHALL · STAFFS

HOPE'S standard windows

CANTERBURY COURT, South Kilburn
Arthur M. Foyle, Ph.D., B.A.(Arch.), F.R.I.B.A., Architect

John C. Morris, B.Sc., M.I.C.E.
Borough Engineer & Surveyor, Willesden

Long Life – minimum maintenance
First-class Fit – bronze fittings
No rust – hot-dip galvanized finish



Patent friction-held cleaning hinge holds casement firmly open in any position – no stay clutters the cill

Send for List 356

HOPE'S WINDOWS
The Name Guarantees

HENRY HOPE & SONS LTD
SMETHWICK, BIRMINGHAM
LONDON: 17 BERNERS ST., W.1

PLUMBERS' BRASS WORK, etc.—*continued*

All per dozen	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Screwdownstopcocksforiron	66/–	95/9	188/–	363/–	522/6	917/6
do. with two unions for lead	89/–	132/–	234/4	472/–	623/6	1,389/6
Double nut boiler screws ...	18/8	26/5	47/6	48/6	67/–	93/6
Heavy Croydon ball valves	77/–	193/6	312/5	568/8	734/10	—
Plumbers' union brass lead to iron	19/6	23/6	38/6	52/10	70/6	165/–
	1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
Caps and Screws	33/–	40/8	59/6	92/5	118/10	155/3
Brass Sleeves	—	31/11	31/11	56/2	74/10	91/5
	1¼×6 lb.		1½×6 lb.	2×7 lb.		3×7 lb.
Lead P. trap with brass cleaning screws	68/6		85/6	137/–		233/9
Lead S. trap do. do.	82/9		102/9	168/3		302/3

Solder :		s.	d.
Plumbers' ...	1 cwt. lots 320/– 14 lb. lots per lb.	3	7
Tinmen's	,, ,, 404/– ,, ,, ,,	4	5
Blow pipe ...	,, ,, 407/– ,, ,, ,,	4	6

COPPER TUBES AND SHEETS

Copper tubes BSS 659/1944 on the basic price of 27¾d per lb. plus gauge and manufacturing extras as follows. Minimum quantities, 10 cwt.

	Extra d.		d.		d.
¼ in. × 19 gauge	16½	Total per lb.	43⅝	Approx. per ft.	11¾
⅜ in. × 19 ,,	14¾	,, ,,	41¾	,, ,,	16½
1 in. × 18 ,,	12⅞	,, ,,	40½	,, ,,	25
1¼ in. × 18 ,,	12½	,, ,,	39⅝	,, ,,	30
1½ in. × 18 ,,	12½	,, ,,	39⅝	,, ,,	36
2 in. × 17 ,,	13⅞	,, ,,	41½	,, ,,	57¾

Small Quantity extras :

10 cwts. to 5 cwts.	plus ½d. per lb.
5 cwts. to 2 cwts.	,, 1d. ,,
2 cwts. to 1 cwt.	,, 2d. ,,

	£	s.	d.
Rolled Copper sheets up to 48 in. wide, basic price plus gauge and manufacturing extras	267	0	0

ZINC

		£	s.	d.
Sheet Zinc, 10 gauge (25 SWG), 5 cwt. lots upwards	per cwt.	8	6	6
,, ,, 12 gauge (23 SWG), ,, ,, ,,	,,	8	4	0
,, ,, 14 gauge (21 SWG), ,, ,, ,,	,,	8	2	9

BRASS TUBE

Brass tubes, basic price, plus gauge and manufacturing extras	per lb.	1	9⅞

LEAD SHEET AND PIPES

Basis selling price to one address in London or Home Counties :

		£	s	d.
Lead Sheet, English, 3½ lb. substance and upwards	per ton	104	15	0
,, Water Pipe, in coils	,,	107	0	0
Lead Soil Pipe, 10 ft. or over 2 in. to 4 in. in dia.	,,	108	10	0
,, ,, ,, over 4 in. dia.	,,	110	10	0
,, Gas or Untinned Compo pipe...	,,	108	10	0

5 cwt. lots and over less 6d. per cwt. off basic prices.

Extras over Basis for quantities under 5 cwt. :			
3 cwt. and under 5 cwt.	per cwt.	4	0
1 cwt. do. 3 cwt.	,,	6	0

Smaller quantities than 1 cwt. priced specially.

Supplying sheet lead and lead pipes to less than basis weights and cutting to sizes less than basis charged extra according to current trade schedule.

Allowance for Old Lead, collected, £53 0s. 0d. per ton weighed at buyer's works.

PLASTER, etc.

		£	s.	d.
Coarse Pink in 1-ton loads and over delivered on site	per ton	8	11	3
do. White do. do. do.	,,	9	0	9
Sirapite Coarse BSS 1191 Class C do.	,,	9	2	9
do. Fine do. do. do.	,,	9	10	6
do. Browning BSS 1191 Class B do.	,,	9	2	9
do. Board Finish do. do.	,,	9	2	9
Blue Lias Lime, in 6-ton loads	,,	6	17	6
Hydrated Lime (Grey) in 6-ton loads	,,	5	10	0
do. (White) do.	,,	6	0	0
Lump Lime (Grey) do.	,,	5	7	0
do. (White) do.	,,	5	14	6
White Keen's or Parian Cement, in 1-ton loads ...	,,	12	7	6
Pink Keen's or Parian Cement, in 1-ton loads ...	,,	12	2	3
Granite Chips, in 6-ton loads	,,	2	6	9
Hair	per cwt.	4	17	6
Gypsum Plaster Lath or Base Board, ⅜ in. thick, 600 yds. and over in one delivery. Delivered site	per yd.	2	2½	
1,200 yds.	,,	2	1½	
do. Insulating do. ⅜ in. thick, 600 yds. and over in one delivery. Delivered site	,,	2	8	
1,200 yds.	,,	2	7	
Gypsum Plaster Wall Boards, 3 and 4 ft. wide 6 to 12 ft., ½ in. thick, 600 yds. and over in one delivery. Delivered site	,,	2	5½	
1,200 yds.	,,	2	4½	
do. Insulating do. ⅜ in. thick, 600 yds. and over in one delivery. Delivered site	,,	2	11	
1,200 yds.	,,	2	10	

PAINTS AND DISTEMPER

Delivered London area.		£	s.	d.
Ceiling Distemper	per cwt.	1	7	6
Washable Distemper	,,	5	15	0
Gloss Paint	per gal.	2	16	0
Super Snowcem cement paint (in 1 cwt. drums) ...	per cwt.	5	0	0

LEAD PRODUCTS AND OILS

		£	s.	d.
Ground White Lead, in 1 cwt. kegs	per cwt.	8	7	6
Genuine White Lead Paint, 1-19 gal. lots in 1 gal. tins	per gal.	3	6	6
Genuine Red Lead, Dry, 1 cwt. keg (10 ton lots)	per cwt.	5	12	6
do. do. do. (1 cwt. lots)	,,	6	19	0
Genuine Linseed Oil Putty, 1 cwt. keg	,,	2	13	6
Size XD quality 28 lb.	per tin		9	0
Raw Linseed Oil (5 gal.) drums extra	per gal.		16	9
Boiled Linseed Oil (5 gal.) do.	,,		17	8

SUNDRIES

Turpentine substitute (5 gal.) drums extra ...	,,	5	4⅜
do. do. (40 gal.) do.	,,	4	8⅜
Solignum, Brown (5 gal. cans) Exterior	,,	10	0
Creosote (40 gal. barrels)	,,	2	3
Paste Powder (1 lb. packets)	per lb.	2	4
White Lining Paper	per piece	1	4

VARNISHES, etc.

Delivered London area.		£	s.	d.
Oak Varnish, Outside or Inside	per gal.	2	0	0
Oak, Pale Copal do. do.	,,	2	0	0
Hard Drying Oak for Inside	,,	2	5	0
Crystal Paper Varnish do.	,,	2	8	0
Eggshell Flat Varnish do.	,,	2	2	0
Finest Carriage Varnish	,,	2	7	0
Front Door Varnish	,,	2	4	0
Japan Gold Size	,,	1	12	0
Black Japan	,,	1	16	0
Brunswick Black	,,	1	12	0
Berlin Black	,,	1	10	0
Terebene	,,	1	12	0
Knotting (1 gal. bottles free)	,,	1	15	0
French and Brush Polish (do.)...	,,	1	15	0

GLASS

Delivered London area.		s.	d.
18 oz. Sheet Glass Ordinary Glazing Quality— Cut Sizes... ... ... per ft. sup.			10
24 oz. do. do. do. do.	,,	1	0½
26 oz. do. do. do. do.	,,	1	3
32 oz. do. do. do. do.	,,	1	7½
¼ in. Rolled Plate...	,,	1	3¾
3/16 in. Rolled and Rough Cast...	,,	1	6½
¼ in. do. do.	,,	1	7½
⅛ in. Figured Rolled and Cathedral, Standard patterns—			
White Group 1	,,	1	3¾
do. Group 2	,,	1	9¾
do. Standard Tints	,,	2	1½
do. Special Tints	,,	7	3
⅛ in. Pinstripe, Hammerstripe, Reeded, Reedlyte and Luminating Group 3	,,	1	8½
¼ in. Wired Cast up to 50 in.	,,	1	10¾
¼ in. do. do. 50 in. to 72 in.	,,	2	2¾
¼ in. Georgian Wired Cast	,,	1	11
Hollow Glass Blocks—			
P.B.2 Cross reeded 5¾×5¾×3⅞ in.	each	3	9
P.B.3 Broad reeded 7¾×7¾×3⅞ in.	,,	5	9
P.B.32 Cross reeded 7¾×7¾×3⅞ in.	,,	5	9
P.B.4 Prismatic 7¾×7¾×3⅞ in.	,,	6	6
P.B.5 Flemish 7¾×7¾×3⅞ in.	,,	5	9
P.B.6 Boomerang 7¾×7¾×3⅞ in.	,,	6	6
Half Size Blocks—			
P.B.32 Cross reeded 7¾×3¾×3⅞ in.	,,	4	10
Radiused Corner Blocks to match up with—			
P.B.2 Cross reeded	,,	8	1
P.B.3 Broad reeded	,,	9	8
P.B.32 Cross reeded	,,	9	8
P.B.2, P.B.3, P.B.32 are also supplied in Light Diffusing Blocks at same price.			
¼ in. Polished Plate Glass, G.G. quality—			
In plates not exceeding 2 ft. sup. ... ... per ft. sup.		4	7
,, ,, ,, 5 ft. sup.	,,	5	7
,, ,, ,, 45 ft. sup.	,,	7	6
,, ,, ,, 100 ft. sup.	,,	7	6
¼ in. Polished Plate, extra sizes, i.e., plates exceeding 100 ft. sup. or 160 in. one way or 96 in. both ways. G.G. quality—Not exceeding 135 ft. sup. or 240 in. one way or 130 in. both ways ...	,,	11	4
Not exceeding 180 ft. sup. or do.	,,	15	0

Plates exceeding 180 ft. sup. prices on application.

Substances other than ¼ in. Polished Plate at Special Prices.

Quantity Tariff—Sheet and Sundry Glass.

The following prices apply to minimum quantities of one size and one pattern delivered by the manufacturer to one site at one time.

Description of Glass—	Minimum quantity	per ft. sup. s.	d.
18 oz. sheet O.Q.	3,000		7½
24 oz. ,, ,, ...	2,000		9¼
26 oz. ,, ,, ...	2,000		11½
32 oz. ,, ,, ...	2,000	1	3½
¼ in. Rolled Plate...	1,000		10⅞
⅛ in. Figured Rolled and Cathedral Standard Patterns, White Group 1	1,000		10⅞
do. Group 2	1,000	1	2⅛
⅛ in. Pinstripe, Hammerstripe, Reeded, Luminating and Spotlyte Group 3	1,000	1	2⅛
3/16 in. Rolled Plate or Rough Cast	2,000	1	2
¼ in. do. do.	2,000	1	2⅛
¼ in. Wired Cast, Hexagonal up to 50 in. ...	2,000	1	5
¼ in. do. do. do 50 in. to 72 in. ...	2,000	1	9
¼ in. Georgian Wired Cast	2,000	1	5½

THE BUILDER RATES OF WAGES

AS FROM FEBRUARY 6th., 1961. (Every endeavour is made to ensure accuracy but we cannot be responsible for errors)

1. Craftsmen and Labourers.

Region	Craftsmen	Labourers
	s. d.	s. d.
England & Wales (Grade A) ...	5 0	4 4½
London	5 1½	4 6
Liverpool and District ...	5 1½	4 6
Scotland... ...	5 0	4 4½

2. Apprentices.

Age	Per cent. of Craft Rate	London and Liverpool Dist.	England, Wales
		s. d.	s. d.
15	25	1 3½	1 3
16	33½	1 8½	1 8
17	50	2 6½	2 6
18	62½	3 2½	3 1½
19	75	3 10½	3 9
20	87½	4 6	4 4½

3. Young Male Labourers.

Age	Per cent. of Craft Rate	London and Liverpool Dist.	England, Wales and Scotland
		s. d.	s. d.
15	33½	1 6	1 5½
16	45	2 0½	1 11½
17	66½	3 0	2 11
18	100	4 6	4 4½

NORTHERN IRELAND is not included; rates fluctuate so much from district to district that reference should be made to local offices.
WATCHMEN.—The rates per shift for watchmen engaged on building sites is 27s. 6d. in London and Liverpool District, and 26s. 3d. in the provinces.
FEMALE OPERATIVES.—In all districts throughout the country except in Scotland the rate of wages for women, aged 19 and over, engaged in craft processes is 4s. 1½d. per hour. Women engaged on work other than craft processes, 3s. 9½d. per hour. In Scotland the rate for the woman craftsman is 4s. 4½d. after a probationary period, and the woman labourer, 3s. 10½d.

Medical Photography

Hospital Building Note Number 19

THE LATEST in the Ministry of Health's series of Hospital Building Notes, No. 19, gives guidance on the design of a medical photography and medical illustration department for general hospitals, including teaching hospitals. It is the eleventh in the series to be published.

A photographic department will normally be required for a hospital or group of hospitals of over 400 beds, it is stated. In smaller hospitals, where there are important specialist units, a department may occasionally be justified. The need for a medical photography department might be greater in some hospitals than in others, e.g., where there are units specialising in burns, plastic surgery, dermatology and orthopaedics. The Note recognises that teaching hospitals and some hospitals with special units might require more than the basic accommodation recommended.

After dealing with general considerations, the Note lists and describes the rooms required and then goes on to discuss the necessary engineering services.

Issued with Building Note No. 19 is an addendum to Appendix E of Hospital Building Note No. 2, which sets out the departmental cost allowances for a Department of Medical Photography and Medical Illustration. A sum of £7,500 is allowed for the basic single-size department itself. For additional accommodation the allowance is £5 2s. per sq. ft. Copies of the Note may be obtained, price 1s. 6d. from Her Majesty's Stationery Office.

'Commerce'

26th Edition of Handy Manual

COMMERCE. Twenty-sixth edition completely revised by H. E. D. Ayling. (Huddersfield: Arthur Fieldhouse Ltd.) Price 10s. 6d. net.

FIELDHOUSE'S 'COMMERCE' maintains its reputation of a handy, inexpensive manual which sets out the broad principles of its subject with the detailed efficiency usually associated with the typical English secretary or the Teutonic bureaucratic mind. Among the preliminary chapters is one dealing with the mystery and mastery of the ubiquitous telephone and another with the virtues of good penmanship. In its reminders for the junior clerk it is amusing to contemplate the quaint naïvety of such instructions as 'keep the inkwells clean' and 'don't allow the fires to go out for want of regular attention.' In this age of central heating and characterless ballpoints such entreaties seem singularly out of context. This rather archaic approach provides much amusement—where alas none is intended—for one can visualise the ink-stained finger-nails, the Gladstone collar, the pince-nez and the tea.

For all its Victorian finickiness, however, the book contains a wealth of information on office routine and administration, trade, finance, insurance, imports and exports, office machinery and business management. As for the approach it will be good for the soul of the office youngster to know the lot of his distant predecessors. Appropos the latter, those modern macaronic galactophiles in duffle-coats and winkle-pickers are not much changed in outward appearance. A delightful piece of Victoriana with much useful, indeed necessary, up-to-date advice and information. AD

'Do It Yourself' Exhibition

THE NINTH International Handicrafts and Do it Yourself Exhibition is to be held in the Empire Hall, Olympia, London, from August 31 to September 16.

New Companies

THE FOLLOWING NEW COMPANIES, registered in England, have been announced by Jordan and Sons, Ltd., company registration agents.

FERNWOOD ESTATES LTD.—Regd. July 20, 1961. 1258-60 London-rd., Norbury, SW16. Secy.: N. M. Brown. Bldrs., contrs., etc. Nom. cap.: £1,000.

F. W. COLLINS CONTRACTORS (IPSWICH) LTD.—Regd. July 21, 1961. 244 Cauldwell Hall-rd., Ipswich. Secy.: Ruby M. Collins. Bldrs., etc. Nom. cap.: £20,000.

A. E. TOPPIN (BUILDERS) LTD.—Regd. July 21, 1961. 26a Philip-rd., Rainham. Secy.: A. Summerfield. Nom. cap.: £100.

A. CUNNICK & SON LTD.—Regd. July 21, 1961. Market Hall-chbrs., Red-st., Carmarthen. Secy.: Sallie Cunnick. Bldrs., etc. Nom. cap.: £100.

CHALCOT BUILDERS LTD.—Regd. July 21, 1961. 23 Chalcot-sq., NW1. Nom. cap.: £1,000.

A. W. R. THOMAS LTD.—Regd. July 21, 1961. Bldrs., etc. Nom. cap.: £1,000. Sub.: Albert W. Roe, 332 Grand-bldgs., Trafalgar-sq., WC2.

E. J. RICHARDS LTD.—Regd. July 21, 1961. 4a Portchester-rd., Bournemouth. Secy.: Brenda Richards. Bldrs., etc. Nom. cap.: £100.

P.E.C. BUILDERS LTD.—Regd. July 21, 1961. Windover-hse., St. Ann-st., Salisbury, Wilts. Secy.: J. R. D. Roberts. Bldrs. and contrs., etc. Nom. cap.: £5,000.

ARTHUR GREEN (MAIDENHEAD) LTD.—Regd. July 24, 1961. Bldr., etc. Nom. cap.: £1,000. Sub.: Percy O. Ansell and George A Corderoy, 116 Chancery-la., WC2.

J. MCGREGOR (BUILDING CONTRACTORS) LTD.—Regd. July 24, 1961. 11 Braebridge-pl., Kenton, Newcastle-on-Tyne 3. Nom. cap.: £500. Dir.: Joseph McGregor.

BUILDERS & CIVIL ENGINEERING (REDCAR) LTD.—Regd. July 24, 1961. 50 Broadway East, Redcar. Secy.: R. W. Baird. Nom. cap.: £10,000.

RILEY (BUILDERS) LTD.—Regd. July 24, 1961. St. Faith's-rd., Old Catton, Norfolk. Secy.: M. I. Riley. Nom. cap.: £3,000.

JOHN COOK (MACCLESFIELD) LTD.—Regd. July 24, 1961. 24a Chester-rd., Macclesfield. Secy.: E. Donovan. Bldrs., etc. Nom. cap.: £100.

THOMPSON DECORATORS LTD.—Regd. July 24, 1961. 66 Hill-st., Richmond, Surrey. Secy.: Elsie M. Thompson. Bldrs. and decrs., etc. Nom. cap.: £300.

MARLOWS (BUILDERS) LTD.—Regd. July 25, 1961. 1 Canterbury-rd., Hanworth Middx. Secy.: G. E. Marlow. Nom. cap.: £100.

R. J. LAKE & CO. LTD.—Regd. July 25, 1961. 26 Lingfield-ave., Kingston, Surrey. Secy.: A. Lake. Bldrs.' and contrs.' plant, etc. Nom. cap.: £100.

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THOUSANDS OF BAGS OF CTF HAVE BEEN USED TO FIX MILLIONS OF CERAMIC TILES PERFECTLY

CTF POSSESSES THE FOLLOWING ADVANTAGES OVER SAND/CEMENT MORTARS:

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* PREMIXED—obviates improper mixing on site—only water is added.
* EASIER, FASTER, NEATER APPLICATION.
* NO SOAKING OF TILES, they are fixed dry.
* INCREASED OUTPUT per man hour.

C T F is supplied in 28 lbs. and 56 lbs. bags.

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BRITISH CERAMIC TILE COUNCIL

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ASCOT AND THE PRIVATE BUILDER: 5

BROOKLANDS DRIVE ESTATE

WILLSON ROAD, DERBY

(23 detached and semi-detached 3-bedroom bungalows)

Builders and Designers:
Messrs. Kirkland (Derby) Ltd., 34/36, Curzon Street, Derby

Hot Water:
20 Ascot 709 B multipoint gas water heaters

This is the fifth of a series of building case-histories illustrating the installation of Ascot instantaneous gas water heaters in private enterprise housing of all kinds throughout Britain. Like others in the series, this example shows how an Ascot hot water system gives flexibility of planning, ease of installation, and economy and efficiency in use.

A kitchen with an Ascot 709B installed. The 709B is fitted with a temperature selector to give the housewife a wide range of water heat.

View from the street of the Brooklands Drive bungalows.

Plan view of a kitchen in a semi-detached bungalow showing position of the Ascot 709 B.

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TECHNICAL REVIEW

This Review of plant, equipment and materials—in most cases new or with new features—is intended to give brief details only of the products mentioned. Notices are based on data supplied by the manufacturers. Additional information and prices can be obtained either direct or by using the prepaid Readers' Service form which appears on page 134 of this issue. The form can be used for more than one inquiry.

1. Air-Conditioning

A special AIR-CONDITIONING PLANT of particular interest has recently been installed in the computer centre of Barclays Bank Ltd. at Drummond-st., NW1. The centre, designed by D. L. G. Shuldham, ARIBA, the Bank's assistant staff architect, generates a considerable amount of heat. To combat this, 30 individual small air-cooled refrigerator units, which are located on the flat roof above the computer centre, were fitted. Each unit is capable of developing 1½ tons of refrigeration apiece, producing a total refrigeration loading of approximately 50 tons. The refrigerated air is passed into the conditioned air space around the computer through very heavily lagged concealed metal ducting. An advantage of this method is that the air-conditioning equipment can be installed without especially reinforcing the roof and it also has the advantage of eliminating the requirement for a large plant room and cooling tower, usually associated with this type of installation.

W. G. Cannon & Sons Ltd., 38a St. George's dr., SW1.

2. Cladding

Interest in the use of glazed CERAMIC MOSAICS for wall cladding is likely to be heightened as a result of the introduction to the UK market of some entirely original designs. These designs, which are marketing under the registered name 'Gemtile,' include new pebble and leaf patterns in various harmonious blends and delightful onyx finishes.

In addition, the surface is smooth and hygienic which makes for ease of cleaning and can be an important factor in industrial areas. For these reasons they are eminently suitable for both exterior and interior cladding. The mosaics are guaranteed frost-proof. Supplies can be obtained from: A. Elder & Co. Ltd., 103 Battersea High-st., SW11, and T. J. Harris & Co. (Liverpool) Ltd., 85 Binns-rd., Liverpool 13.

The Adamite Co. Ltd., 94/98 Petty France, London, SW1 (sole concessionaires).

3. Miscellaneous

'Stanofone,' a new portable TELEPHONE SYSTEM for up to 20 miles has recently been marketed. It is powered by three torch-type batteries which are housed, with the necessary equipment, in a handset weighing 19 oz with batteries. The system needs only a pair of wires or a single wire and earth to operate. It is connected by baring the ends of the wire, pressing down the spring terminals and inserting the bare wires. A button is pressed to make the calling signal and another button for speech.

It has been installed in the new Scottish Gas Board's Lurgi Gasification plant at Westland, Fife, which was opened by the Queen recently.

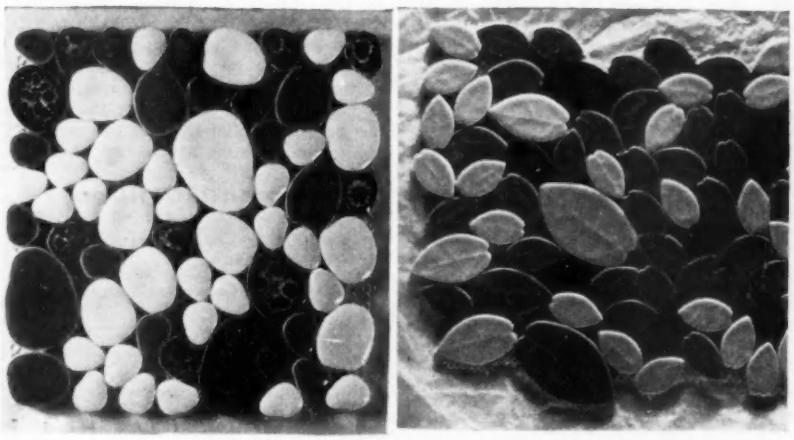
Standard Telephones & Cables Ltd., 29/30 Glasshouse Yard, Aldersgate-st., London, EC1.

4. Fixing

A WALLPLUGGING material, known as Tornado Stripfix, provides a new and interesting method of fixing wood screws into all kinds of masonry. It consists of a plastic strip divided into 12 ribs, serrated at ⅜in intervals. With the one strip it is possible to fixe any size and length of screw; three ribs for screw sizes 6 and 8, four ribs for sizes 10-12 and so on. The number of ribs at the required length are torn off, and the strip rolled into a plug with the tooth edge on the outside. The plug is then pushed into the hole and the screw tightened. Over 100 permanent fixings can be made from each strip.

Tornado Fixings Ltd., 27-37 Broadwick-st., London, W1.

Glazed ceramic mosaics in pebble and leaf patterns for wall cladding



5. Technical Publications

(a) In common with many other industries, one of the problems in the building industry to-day is to communicate information not only on new materials but also on new applications and techniques of traditional materials. With this in mind the BRITISH ALUMINIUM CO. LTD., of St. James's-sq., SW1, has initiated a building advisory service. A new manual has been prepared as a part of this service and has been compiled in such a way as to facilitate ready and rapid reference. Divided into five sections, the manual will constantly be kept up to date. Copies will be supplied free of charge to every architectural practice in the UK. Further information can be obtained from the company.

(b) An unusual description of working a wet site—namely by a 'storey strip' technique—is used by BLAW KNOX LTD. in catalogue No. 325, which describes the company's 'Moretrench' wellpoint dewatering system. The whole operation is covered in this booklet, which should prove of value to engineers and contractors faced with site pre-drainage problems. Copies from the company at Short's Way, Rochester, Kent.

(c) A colourful and well-designed brochure has been issued by TURNER BROTHERS ASBESTOS CO., LTD., describing the company's glass fibre materials, Duraglas and Duramat, and some of their applications. The publication is dominated by the photography which is excellent throughout. Copies can be obtained from the company at Rochdale, Lancs.

(d) THE LEAD DEVELOPMENT ASSOCIATION has published the latest edition of 'Leadwork for Plumbers.' The leadwork for the new clerestory roofs at Brasenose College are described. There are also articles on jointing, leadburning, lead coverings and sheet leadwork on new houses. Copies available from the Association at 34 Berkeley-sq., W1.

(e) 'Foamjoint' strip and UAM 'Hole-Seal' plastic washers, which are combined to produce gutter joints, are explained in a leaflet issued by UAM. The system avoids the use of tarred hemp and mastic, and joints can be made in any weather conditions. The strip is an expanded butyl rubber and is produced in a standard width of 3in. with a thickness of ⅜in., and in lengths suitable for all types of gutter. Joints are completed with bolts and 'Hole-Seal' washers which compress the jointing strip. They are waterproof, even when little more than finger tight. The leaflet, giving full instructions, is obtainable from the Universal Asbestos Manufacturing Co. Ltd., at Tolpits, Watford, Herts.

News in Brief

Trosley Towers Inquiry

ARRANGEMENTS have been made for a public inquiry to be held into a proposal by Messrs. Croudace Ltd. to build a Trosley Woodland Village for about 2,500 people on a 155-acre site on the North Downs at Trosley Towers, near Wrotham, Kent. It will be conducted by Mr. J. G. Birkett, and will open at the County Hall, Maidstone, on November 21. Outline planning permission for the residential development of the site was granted by Kent CC in 1952. It was announced in May this year that because of the volume of public objection to the present proposal Mr. Henry Brooke, Minister of Housing and Local Government, had decided to hold a public inquiry, and on the evidence submitted there, would decide whether the circumstances were such that he should consider exercising his powers under section 100 of the Town and Country Planning Act, 1947, to modify or revoke the relevant planning permission.

Rates of Remuneration for Watchmen

AT ITS MEETING on April 26 the National Joint Council for the Building Industry decided to increase the current shift rates for watchmen, as laid down in working rule 1(f), by 3s. per shift. The notice of promulgation issued by the Council on May 24, which makes the increase payable from October 2, refers to the rates for index range 98 to 100 (new rate, 29s. for London and Liverpool and 27s. 9d. for the provinces) and 100 to 102 (new rate, 29s. 3d. for London and Liverpool and 28s. for the provinces). Other rates will be promulgated in September in a revised schedule of building trade wage rates.

Lodging Allowance Rates Increased

AT ITS MEETING on July 20 the National Joint Council for the Building Industry decided to revise the rate of lodging allowances stipulated in National Working Rule 6B(3). The rate, hitherto 9s., was raised to 11s. with effect from August 7.

The Late Mr. S. Clipson

THE DEATH occurred on July 31 of Mr. S. Clipson, founder of the following companies: C. and T. Painters Ltd.; Commercial Vermiculite Ltd.; and Compair (London) Ltd. His forthright manner and old world courtesy will be remembered by his colleagues and friends.

Main and Sub-Contractor Co-operation

THE LMBA has published a report of the conference held in March at Sundridge Park Management Centre in conjunction with the Federation of Associations of Specialists and Sub-Contractors on co-operation between main contractors and sub-contractors in the building industry. The object of the conference was to examine the existing methods of liaison and communication and to suggest improvements, both before and after work on site has commenced. The report includes a summary of the conclusions and recommendations. Copies are available from the association at 47 Bedford-square, WC1, price 2s. 6d.

The Late Mr. G. H. Jackson

THE death is recorded of Mr. George H. Jackson after a recent motoring accident in Derbyshire. He was 72. Mr. Jackson, until 1958 chairman of Chaseside Engineering Co. Ltd., was the originator in Europe of the mobile loading shovel and produced the first Chaseside loader in 1925.

Trades Union Machinery on Film

'THE GRIEVANCE,' a film now available from the Central Film Library of the COI, follows the journey of a Canadian worker's grievance through several stages of negotiation to its final settlement. It shows the machinery available for dealing with such situations and runs for 30 mins. The hire charge is 15s. per day plus 1s. 6d. per 16mm. reel. It is available from the industrial section of the library at Government Building, Bromyard-avenue, Acton, W3.

Welding Engineering 1962

THE INSTITUTE OF WELDING is holding its first exhibition in conjunction with the spring meeting of the institute in Buxton, Derbyshire, next April. The exhibition will cover all the processes and techniques with which the institute is primarily concerned. It will include a section devoted to research and a display of detailed illustrations of welded construction submitted by industrial corporate members of the institute. There will also be an international exhibition of welding publications. The subject of the spring meeting is to be 'Welding for Power Generation' and will include nearly thirty papers.

Radiators in Interior Design

Results of Recent Competition

THE WINNER of the first prize of £150 in a competition organised by Henry Wilson & Co. Ltd., to illustrate how their 'straightline' panel radiators could be incorporated into interior design instead of merely being an addition, was Mr. G. Copcutt, BA, ARIBA, who is architect in charge of the central area of Cumbernauld New Town under Mr. L. Hugh Wilson, OBE, FRIBA. He submitted six designs, each of which was 'imaginative' and used the panels and pipework to full advantage. His designs were for an auditorium foyer, a ballroom, an exhibition hall, the reception floor of an office building, a restaurant, and a two-storey car showroom. The second prize was won by Mr. J. B. Malton, ARIBA, of Grays, Essex, and the third by Mr. W. F. Martin, a registered architect of East Barnet, Hertfordshire.

The awards were presented at the Building Centre on August 9, where the winning designs, together with the highly commended design which was submitted by J. J. Cadwallader, of Sutton Coldfield (son of J. D. Cadwallader, ARIBA), and certain selected designs were displayed. The judges for the competition were: Mr. L. C. Rayner, past president of the Institute of Heating and Ventilating Engineers; Lady Mary Hesketh, interior decorator; Mr. Ewan G. Blackledge, BArch, ARIBA; Mr. D. A. Kerr Wilson, managing director and Mr. T. M. Lynch, sales director of Henry Wilson & Co. Ltd.

Whilst many of the designs on show were not as original or expansive as Mr. Copcutt's, they all contributed to the conclusion drawn by Mr. Wilson when he said that the radiators had lent themselves to new and attractive methods of design and could be absorbed into modern interior decor.

Trade News

Home Sales' Scheme

NEW HOME MARKETING arrangements for Arcon buildings are announced by Taylor Woodrow (Arcon) Ltd. with the appointment of 20 builders' merchants as corresponding agents covering England and Wales. Mr. J. Pottinger has been appointed sales manager to take charge of the scheme.

Housing Estates for Old People

GREGORY HOUSING LTD. have designed a development consisting of 'L' shaped bungalows in groups for elderly people. The bungalows, which are of traditional construction, will cost on average £825 to £850 each. The scheme is designed to provide a communal life with adequate privacy, and each person can have self-contained accommodation. Further details from Gregory Housing Ltd., 21 Farncombe-road, Worthing.

Decorative Wallboards

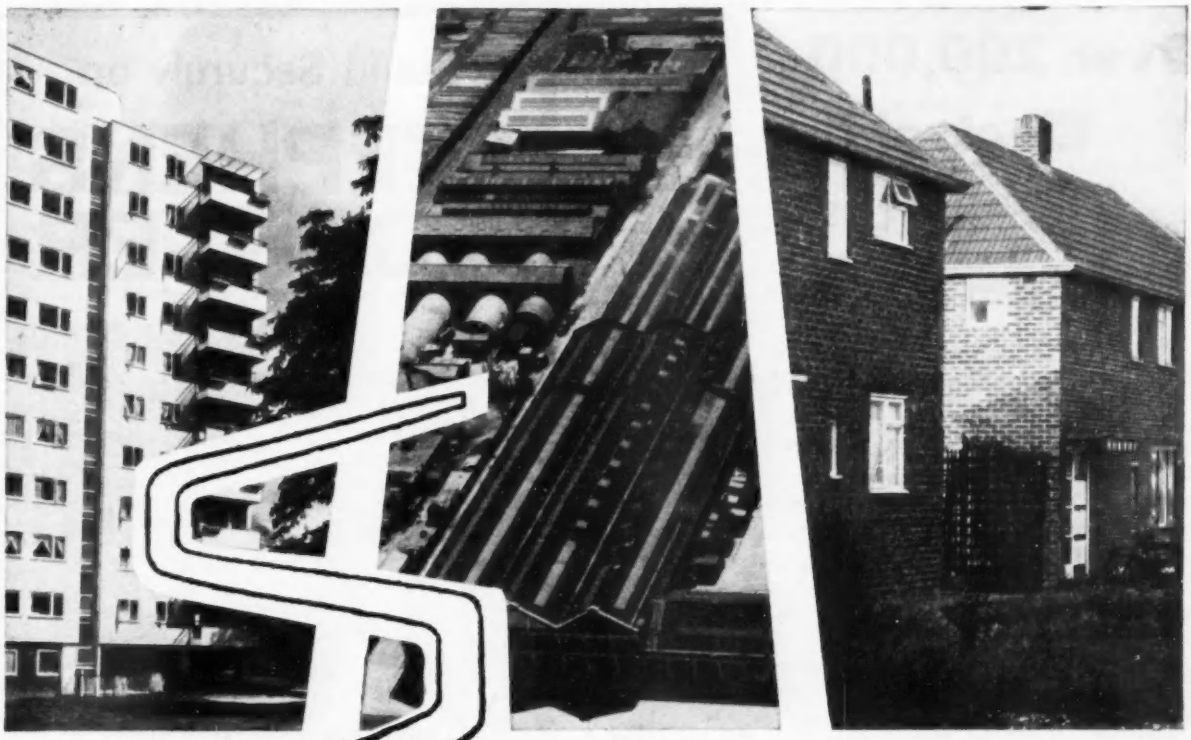
TO OVERCOME the problem of jointing in the use of decorative wallboards, Paniquil (Sales), Ltd., London, manufacturers of quilted plastics on hardboard, are now producing a 2-in. squares design in boards that end on a full square at all four edges. This means that the boards can be butt-jointed without the need for any trimming work being done on them.

Personal Column

The death is announced by the International Nickel Co. (Mond) Ltd. of MR. GEORGE SANDLAND.

MR. ROY MONERY has been appointed a technical director of Courtney, Pope (Electrical) Ltd., Amhurst Park works, Tottenham, N15.

Nevill Long & Co. (Boards) Ltd., of Southall, Middx., have opened a Midlands office at 18 South-rd., Stourbridge, Worcestershire (tel: Stourbridge 4380). Mr. L. Roy Meek has been appointed the branch's representative.



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The new '800 range' KONTITE type 'B' Gunmetal Fitting

Made entirely from gunmetal and bronze, for maximum resistance to corrosion, the new Kontite Type 'B' flared fitting can be supplied in a large variety of forms and with any combination of ends. The outstanding features include:

* New anti-friction collar between nut and tube prevents tube being twisted as nut is tightened.
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* Flaring can be done with a simple flaring punch.
* Annular ridge on the jointing face of the fitting, beds into the tube and gives additional seal.

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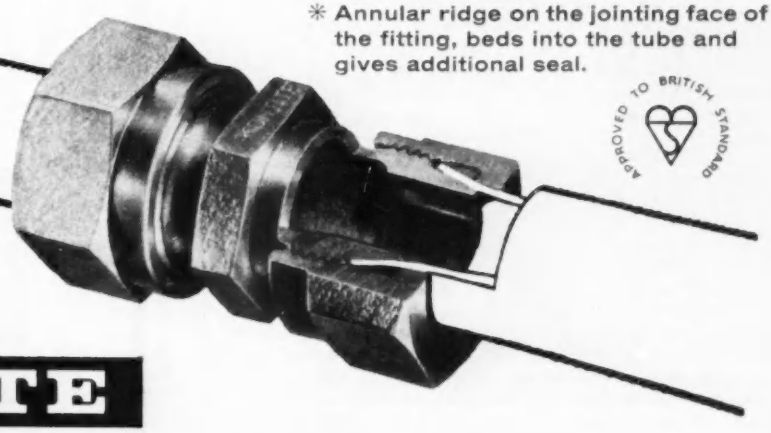

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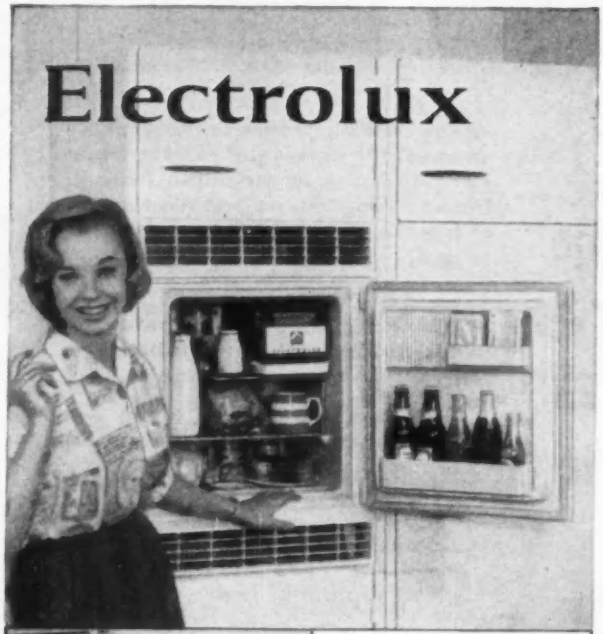

MODEL MB.16
- Builds into kitchen fitments at waist height, at floor level under draining board or working top unit of British Standard specification.
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SC73

Record Year for Colonial Development

£226½m. Spent Since 1946

PROVISIONAL FIGURES published in the annual return of schemes made under the Colonial Development and Welfare Act show that nearly £26m. was spent to benefit Britain's overseas territories during the last financial year. The return, which covers the period April 1, 1960, to March 31, 1961, may be obtained from HM Stationery Office, price 3s.

Issues for development projects in the oversea territories during the year amounted to £25,977,000 (including £1,352,000 for research). This brought the total for issues since April 1, 1946, to £226,576,440 of which £209,248,920 was for development and welfare and £17,327,520 for research. Commitments undertaken during the year totalled £35,291,739 for development projects and £2,186,869 for research. Exchequer Loans approved during the year totalled £25,000,000 and included £8½m. to the East African High Commission for the development of the railway system, road and water transport services and the construction of new wharves, quays and jetties.

Nearly £8m. for East Africa

Grants and loans approved for East African territories during the year amounted to £7,964,308 of which £3,044,846 was for TANGANYIKA and £2,387,168 for KENYA. Among the grants for Tanganyika were £260,839 for extensions to secondary schools and teacher training centres and £249,400 for improvements to the Mikumi/Msolwa road. In Central Africa, NYASALAND was granted £1,191,428 including £257,957 for the development of African education, £247,500 to reconstruct part of the Chileka/Matope road and £224,421 for African land reorganisation. NORTHERN RHODESIA benefited by £621,773 of which £512,560 was to improve African education facilities by building and expanding trades and technical schools, teacher training colleges and secondary schools.

Grants and loans for the West African territories totalled £2,696,067. Of the £1,336,009 approved for SIERRA LEONE, £301,500 was for mechanical plant for the public works department and £189,375 was for railway development. The GAMBIA benefited by £737,470 of which £240,470 was for road development and three grants totalling £248,717, were for the construction of the Gambia High School and other school buildings.

Educational Development

Grants and loans for MALTA totalled £5,369,465, among them a grant of £848,810 for a primary school building programme. GIBRALTAR received two grants during the year—£500,000 towards the cost of the 1960-63 housing programme and £47,000 for road reconstruction. Grants for educational development accounted for £481,368 of the £807,989 approved for ADEN, and included one grant of £200,000 for the building and extension of primary and intermediate schools.

In the Far East, grants totalling £1,619,183 were approved for development in SARAWAK—including £1,176,455 for road works—while in NORTH BORNEO grants and loans totalled £1,065,432, including £593,556 for road developments and £346,506 for further educational facilities. In the Western Pacific, FIJI benefited by £465,306 — including £145,946 for an outpatients and operating theatre block at the Colonial War Memorial Hospital, Suva, and £137,027 to build a Technical Institute—while the BRITISH SOLOMAN ISLANDS PROTECTORATE was granted £318,904 which covered a wide variety of schemes.

Among grants and loans to THE BRITISH WEST INDIES for schemes of general benefit (totalling £2,617,857) were 32 grants for the University College of the West Indies amounting to £1,493,170. Development grants and loans for individual territories in the Federation provided another £2,287,271. Grants and loans to BRITISH GUIANA totalled £2,920,230 and to BRITISH HONDURAS £789,351.

OVERSEAS BUILDING

From Our Own Correspondents

AUSTRALIA (NSW).—Qantas Airline plans to form a new company to finance a new hotel in Sydney at a cost of £A5m. It will have 400 rooms and give accommodation priority to international air travellers.

AUSTRALIA (QUEENSLAND). — An aluminium railway station is to be installed at Mount Isa, in northwest Queensland. Aluminium has been chosen because of the extreme summer heat that ranges from 100 to 120 degrees. The upper section of the building will be air-conditioned.

BWI (TRINIDAD).—The Industrial Development Corporation is negotiating with foreign companies which it hopes to attract to Trinidad to invest about WI$200m. in various enterprises, including a lubricating oil plant and petrochemical industries.

CANADA (MANITOBA).—A $4.5m. oil refinery is to be constructed at The Pas, by Canadian Kodiak Refineries, Ltd.

CANADA (MONTREAL). — The Federal Government has launched a 15-year improvement programme for the International Airport at Montreal. Its main feature is the relocation of runways.

CANADA (ONTARIO).—Dormitory facilities for 315 students are to be constructed at Carleton University, Ottawa, at a cost of $1.5m. . . . A multi-million-dollar hydro-electric construction project has been announced for Otter Rapids.

CANADA (QUEBEC).—A $20m. international exhibition building is to be constructed in Montreal. . . . Shawinigan Water and Power Company is to construct a $20m. petro-chemical plant on the outskirts of Montreal. . . . A $45m. thermal electric station will also be constructed in association with the Shawinigan project. The station will be located at Tracy, approximately 40 miles from Montreal. . . . A 40-mile road is to be constructed to link an asbestos mine in Ungava with Deception Bay on the northern tip of Quebec.

CANADA (SASKATCHEWAN). — Solarpane Manufacturing Co. Ltd. is to construct a new plant at Regina. . . . Nesco Aluminium Co. Ltd. is to construct a new plant at Regina.

CHILE.—The Anaconda Co. plans a copper refinery at Chanaral to process the production of the company's El Salvador mine, together with 20,000 tons from other sources.

EL SALVADOR.—The Government plans the construction of a modern airport at Acajutla.

KASHMIR.—The Prime Minister has announced that a paper pulp plant will soon be established at Ladoora, near Baramula.

NIGERIA.—Costain (West Africa) have started work on the construction of a Flour Mills project at Apapa, Lagos, for Flour Mills of Nigeria Ltd., consisting of a 6-storey mill, 33 storage silos, warehouse and office block, together with a special grain loading and unloading tower and conveyor system. Completion is scheduled for April, 1962.

NORTHERN RHODESIA.—A new mountain road, 20 miles long, which will require 30 bridges and more than 100 culverts is to be built in the Isoka District of the Northern Province. It will cross the Luangwa Valley, and will link Isoka with a Nyasaland border road between Katumbi and Fort Hill.

NORWAY.—The Horten council, which was to have given financial support to the establishment of a factory to produce the

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'Noble Viking' car on the Oslo Fjord (as reported in 'The Builder' of August 4, 1961), has withdrawn its support because the British originators have not managed to secure the required capital.

PORTUGAL.—Nine Shawnee Poole Rear Dump Haulers, worth £20,000, have been ordered by a Portuguese Contractor for the Dili Airport in Portuguese Timor.

SOUTH AFRICA.—A £13m. housing scheme for Indians at Chatsworth, near Durban, South Africa, has been approved by the National Housing Commission. Construction of the first 1,872 houses is starting at once, and tenders for the others will be called soon. The project is hoped to be completed within 5-7 years.

URUGUAY.—86m. peso construction of a drinking water purifying plant in Montevideo has been authorised by Congress.

Engineering Appointment in Argentina

THE MINISTRY OF PUBLIC WORKS of the Province of Santa Fe wishes to obtain the services of an engineer or engineering company to take part in the development of Rosario airport. Proof of ability and details of experience in airfield construction to the Delegación del Gobierno de Santa Fe, Presidente Julio A. Roca 610, 5° piso, Buenos Aires. The closing date is August 30.

Road Plant for Argentina

A SERIES OF CONTRACTS during the last few weeks have established a new market for British manufacturers in Argentina. Three of these contracts have been negotiated through Knowles and Foster, City of London merchant bankers, and Mercator S.A. of Buenos Aires. The contracts include one of £350,000 for plant to be used on a road project in the Province of Neuquen, and another for construction equipment totalling nearly one and a half million pounds for the Province of Santiago del Estero.

Mr. Jorge Stern, managing director of Mercator is at present in this country negotiating further contracts on the same basis. Shipment of a consignment from the second contract just completed with the Province of Entre Rios covers Wakefield motor graders worth a quarter of a million pounds. More Wakefield graders are included in the current deal supplied by Construction Machinery Ltd., with Broom and Wade compressors, Chaseside loading shovels, Curtiss Wright scrapers, and Foraky drilling equipment.

Overseas Contracts Open

IRAQ.—Tenders are invited for construction of Dibbis Dam of Kirkuk Irrigation Project, consisting of concrete spillway with radial crest gates, the main body of the dam of compacted river bed gravels with vertical articulated core wall and a head regulator for an offtake canal. Tender documents may be obtained from the Legal Section of the Directorate General of Irrigation, Baghdad, or from the Iraqi Embassy, London, or may be inspected at the above and at Iraqi embassies and legations and at the office of the consulting engineers, Binnie Deacon & Gourley (Baghdad). Tenders to be submitted on or before November 8, 1961.

SUDAN.—Tenders are invited for design and construction of rc or steel roadway across River Nile between Omdurman and Shambat, and construction to consulting engineers' design of roadways on steel cantilevers on outer sides of existing Khartoum-Omdurman bridge over the White Nile. Each roadway to be 2,012 ft. long and 13 ft. wide with a 3 ft. footpath. Preliminary drawings can be seen at the office of the Director, Ministry of Local Government, Khartoum, and the consulting engineers, Messrs. Coode & Partners, Abbey-hse., Victoria-st., London, SW1. Tender documents will be issued on November 17, 1961, and four months given to tender. Applications to be invited to tender to the Director or the consulting engineers on or before September 15 with details of relevant experience.

SCOTTISH BUILDER

Replacement of Older Houses

A PROPOSAL to replace corporation houses in certain older housing areas in Glasgow with multi-storey flats is to be examined by the corporation's housing committee as a long-term plan to meet the city's housing shortage. The City Architect, Mr. A. G. Jury, has been asked to suggest an area which might be suitable for such an experiment. The pre-war housing areas of Kingswood and Mosspark have been mentioned as sites where it might be practicable to carry out the experiment.

Colour for the Royal Mile

A PANEL of architects who have been working on plans to improve the appearance of the Royal Mile in Edinburgh are expected to make their first suggestions known within a few weeks.

The panel were appointed by the Edinburgh Architectural Association after an approach had been made to them by Edinburgh Corporation, who are meeting the initial cost. The initiative in seeking improvements was taken by the Royal Mile Association, representing almost half the 150 businesses in the Royal Mile. The first phase of the suggested scheme takes in the part of the Royal Mile from St. Mary's-street to the Tron Church corner.

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New Buildings

DUNDEE.—The Secretary of State for Scotland has agreed that a start may be made soon on preliminary work on the approach roads for the Tay road bridge at the Dundee terminal. This will include the filling in of the tidal harbour and the Earl Grey dock at Dundee. The building of a closing wall close to the mouth of the harbour will be necessary for this filling work. An early start to the £4m. bridge is urged by Dundee's Lord Provost to try and solve some of the local unemployment problems.

FALKIRK.—TC has approved plans for a £600,000 municipal development scheme. New municipal buildings will be located at Westbank, near the town centre, and will house all municipal departments. Parking facilities for about 300 cars will be provided at the rear.

GLASGOW.—The corporation's planning committee are to submit to the Royal Fine Art Commission plans for a major extension to Glasgow School of Art, Renfrew-st. The extension, it is proposed, will be built opposite the present school which was designed by the Scottish architect, Charles Rennie Mackintosh.

GLASGOW.—It has been recommended that Glasgow Corporation accept an offer of £1,214,408 for the reconstruction of the Govan refuse power works. The present works have been in use for over 50 years and are obsolete by modern requirements. The plant is designed to handle between 600 and 700 tons of material daily and construction will be carried out by Heenan & Froude, Ltd., Worcester. . . . The City Magistrates have approved in principle the conversion of the George Cinema, Cathcart, into a bowling alley. The building will have two floors, each designed for ten rinks. . . . The municipal transport committee has accepted an offer by Carmichael Brown Ltd. to convert the Maryhill tram depot into a motor bus garage at a cost of £172,257.

GLENROTHES.—The first phase of the town centre development in the new town of Glenrothes, Fife, is expected to commence this month. This phase represents half of the ultimate development of the town centre and is expected to cost in the region of £750,000. It is expected to be completed in 1963. The development will include a bus station, hotel, shopping area and a bowling alley. In addition to the outlay by the New Town Corporation, Messrs. Woolworth's are to build a large store.

INVERNESS.—Plans for the second largest post-war private housing scheme in Inverness, the erection of 105 houses and 24 flats at Muirton, have been submitted to Inverness Dean of Guild Court. The cost of the project is estimated at £300,000. The application was presented by Mr. Angus MacBeath, architect, Union-st., Inverness.

RUTHERGLEN.—Erection of 40 cottages and terrace-type houses at Fernhill, Rutherglen. Applications to Burgh S., Town Hall Buildings, Rutherglen.

SELKIRK.—Erection of new Galashiels Academy. Approx. 88,000 sq. ft. floor area. Applications to Messrs. J. & J. Hall, Ladhope Vale, Galashiels.

WIGTOWN.—Supplying, laying and testing of 8 miles of 12 in. dia. spun-iron piping. Construction of reinforced tank of 150,000 gal. capacity plus relative works. Applications to Messrs. Crouch & Hogg, 18 Woodside-cres., Glasgow, C3. Dep. £5.

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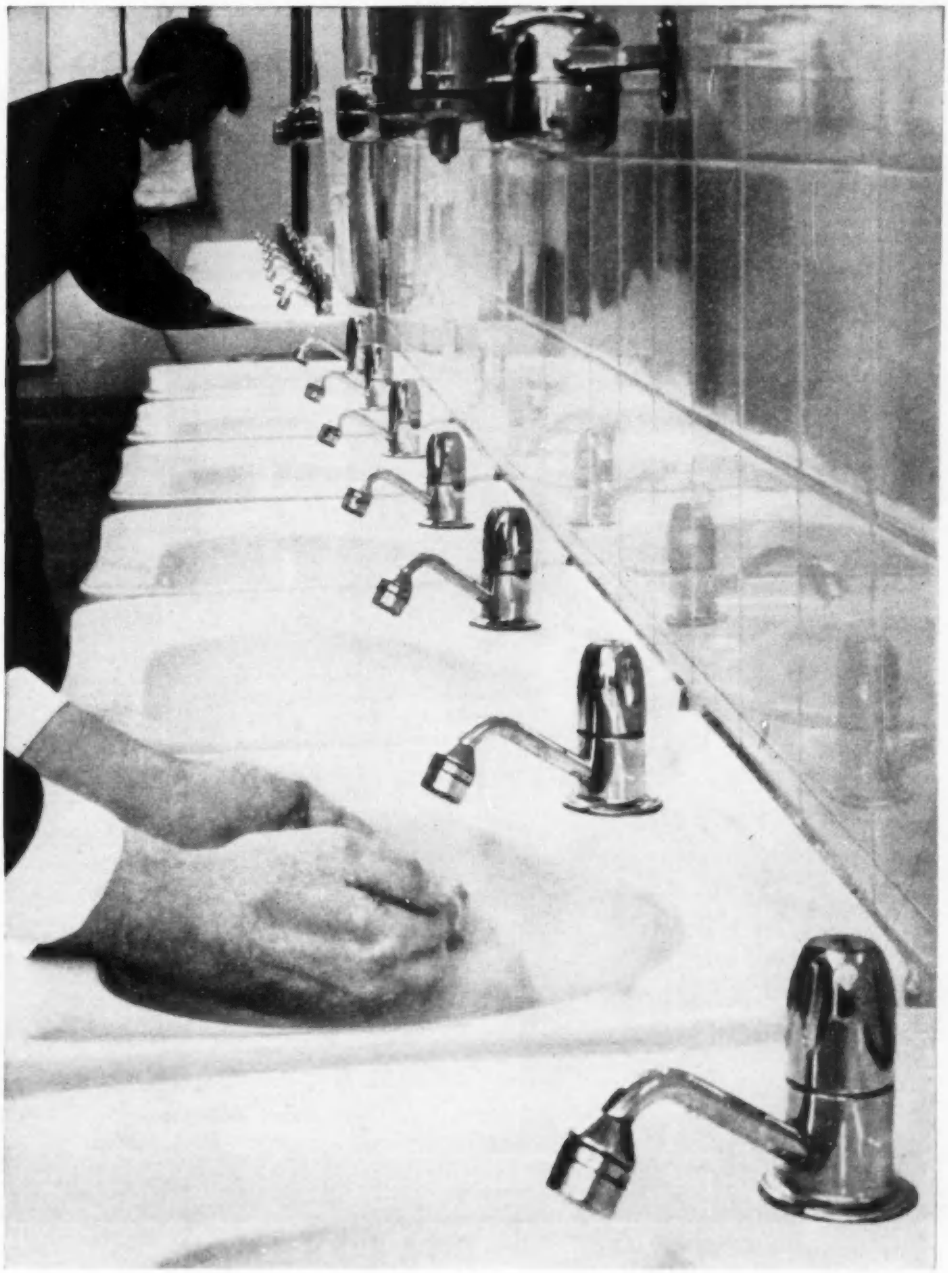

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THE BUILDER CONSTRUCTION NEWS

Full details of Public Appointments open will be found in the Advertisement pages of this and previous issues.

CONTRACTS OPEN

For some contracts still open but not included in this list, see previous issues. Those preceded by the symbol (A) are advertised in this number. The latest date for the receipt of tenders or applications appears above each paragraph. The symbol (R) preceding each entry indicates that application must be received by this date.

BUILDING

AUGUST 22

(AR) BRISTOL CITY C.—Fixed price tenders for a three-bay fire station at Clothier-rd., Brislington, Bristol 4. City A.

(AR) ENFIELD BC.—Erection of 12 three-storey flats, 22 houses and 34 garages at Ferns nursery estate. Boro' E&S. Dep. £2 2s. Tenders by Sept. 18.

(AR) NAPSBURY HOSPITAL MANAGEMENT COMMITTEE.—Extension to staff social club premises. M. Meacher, architect, 1 College-st., St. Albans, Herts. Tenders by Sept. 25.

AUGUST 23

(AR) EAST SUSSEX CC.—Erection of branch library at Crowborough. County A.

NEWRY RDC.—Erection of 18 houses at Castle Hill, Rathfriland, and 36 houses at John-st., Rathfriland. Clerk of Council. Dep. £10 10s.

AUGUST 25

(AR) DAGENHAM BC.—Extension to municipal offices. Boro' S.

(AR) EAST SUSSEX CC.—New recreation room, etc., at Heathfield fire station. County A.

AUGUST 26

(AR) JARROW BC.—Erection of 111 dwellings at Hedworth estate. Boro' E. Dep. £2 2s.

AUGUST 28

(AR) GLOUCESTERSHIRE CC. — Extensions to Chipping Campden grammar sch. County A. Dep. £2 2s.

(AR) PORTSMOUTH CITY C.—Additions and alterations to police headquarters, Queen's-cres. City A. Dep. £1.

(AR) WORCESTERSHIRE CC.—Proposed extensions to Kidderminster girls' high sch. County A.

AUGUST 29

(AR) FRIMLEY & CAMBERLEY UDC.—Construction of 132 dwellings at Old Dean Common estate, Camberley. Close & Morton, 20-22 High-st., Camberley. Tenders by Oct. 17.

AUGUST 31

CLONES (Eire).—Erection of a new factory for Erntex Ltd., at Clones. P. J. McCabe, architect, The Diamond, Clones, Co. Monaghan. Dep. £25.

SEPTEMBER 1

(AR) BASILDON UDC. — Erection of 56 three-bed. maisonettes in 4-storey blocks at Victoria-rd., Laindon, Essex. E&S. Dep. £2 2s.

(AR) SOUTHEND-ON-SEA CBC.—Proposed lavatory extensions to Bournemouth Park-rd. jun. sch. Boro' A. Dep. £2.

SEPTEMBER 4

(AR) BASILDON UDC.—Erection of 42 garages at Winifred-rd. housing estate, Pitsea. E&S. Dep. £2 2s.

(AR) SOUTHEND-ON-SEA CBC.—Proposed garage for 40 vehicles at central cleansing depot. Boro' A. Dep. £2.

(A) WALSALL CBC.—Erection of drill and hose-drying tower at Bloxwich fire station. Boro' E&S. Dep. £2 2s.

SEPTEMBER 5

(AD) HAMPSHIRE CC.—New health clinic, community centre and ambulance station at Leigh Park, Havant. Clerk to C. Dep. £2 2s. Tenders by Oct. 9.

(A) HAVANT & WATERLOO UDC.—Erection of eight flats and four houses, etc., at Forest End, Waterlooville. E&S.

SEPTEMBER 11

(A) SALE BC.—Firm price tenders for: (a) Erection of 32 aged persons' flatlets, 16 flats, warden and communal accommodation, etc.; and (b) eight flats, all at Roebuck-la./Hollins-gr. development site. Boro' E. Dep. £2 2s.

(A) SOUTHBOROUGH UDC.—Erection of dressing rooms at Yew Tree-rd. playing fields. S.

(A) WOKINGHAM BC.—Erection of 22 garages, etc. Boro' S.

SEPTEMBER 12

DUBLIN (Eire).—Erection of one 2-storey block of flat dwellings at Braithwaite-st housing area. City Treasurer, Exchange Buildings, Edward-st., Dublin. Dep. £10 10s.

SEPTEMBER 15

(A) SOUTHPORT CBC.—Erection of two aged persons' dwellings at Grantham-cl. housing site, Birkdale. Boro' A & TP Officer. Dep. £2 2s.

SEPTEMBER 18

(A) WORCESTER CITY C.—(a) Erection of 156 dwellings at Warndon estate, and (b) ten dwellings at Powell's-row redevelopment area, St. John's. City E&S. Dep. £3 3s. (each contract).

SEPTEMBER 19

(A) WEST RIDING OF YORKSHIRE CC.—Formation of rural studies unit, etc., at Bentley High-st. sec. sch. Divisional A.

SEPTEMBER 20

(A) MANSFIELD BC.—Erection of 10 bungalows at Ravensdale housing estate. Boro' E&S. Dep. £2 2s.

NO DATE

(A) LLANELLY CORPN.—Fixed price tenders for 66 houses, eight bungalows and two shops, at Llwynwhilwg site. Boro' A. Dep. £2 2s.

SERVICES, PAINTING, MATERIALS, ETC.

SEPTEMBER 11

(A) ABERYSTWYTH BC.—Interior decoration of King's Hall. Boro' S.

SEPTEMBER 18

(A) WOODSTOCK BC.—Demolition of nine cottages at St. Andrew's-sq. H. W. Smith & Son, architects, 29 George-st., Oxford. Dep. £2 2s.

MUNICIPAL AND CIVIL ENGINEERING WORKS, ETC.

AUGUST 29

HARROW BC.—Burning off and resurfacing of approx. 7,000 sq. yd. of carriageway with hot rolled asphalt, relaying of approx. 600 lin. yd. granite kerb, reconstruction in bitumen macadam of footways, partial reconstruction of carriageway foundation, footway drainage, and other ancillary works at Whitchurch-la. / Buckingham-rd./Montgomery-rd. Boro' E. Dep. £2 2s.

MOSSLEY BC.—Supply, delivery and laying of approximately 13,000 super yd. of two-course and single-course bituminous macadam, for surfacing of county and district roads within borough. Boro' E&S. Dep. £2 2s.

SEPTEMBER 1

BASINGSTOKE BC.—Construction of roads and sewers at Houndmills industrial estate (phase II). Boro' S. Dep. £2 2s.

SEPTEMBER 20

TAUNTON BC.—Fixed price tenders for the laying of approx. 7,100 yd. of 9-in. and 6-in. dia. spun-iron pipes, with tyton joints at Priorswood-rd., Durston trunk main. E&M. Dep. £2 2s.

GENERAL BUILDING WORK (LONDON)

CAMBERWELL.—Planning Application.—The LCC has received from Geo. Watt & Ptnrs., a town planning application for the erection of flats and houses at College-rd.

FULHAM.—Planning Applications.—The LCC has received the following town planning applications: Airline terminal and underground station at Lillie Bridge/Old Brompton-rd./Lillie-rd. (Larn Biel & Ptnrs.); flats at Peterborough-rd./Matheson-rd. (BC).

HACKNEY.—Planning Applications.—The LCC has received the following town planning applications: Flatted factory at De Beauvoir-cres. area (Hackney BC); new factory at Urswick-rd., Hackney (F. A. Reed & Ptnrs.).

HAMPSTEAD.—Planning Applications.—The following town planning applications have been received by the LCC: Block of 35 flats at Fellows-rd. (P. & D. T. Myers); two blocks of flats at Mount Tyndal/Spaniards-rd. (M. Barnett & Hampton); warehouse and offices at Blackburn-rd. (Jenkins, Manning, Potter and Clamp).

LEWISHAM.—Planning Applications.—The following town planning applications have been received by the LCC: Office, factory and warehouse at Catford Bridge station (Begby & Mears); showrooms, workshops, petrol filling station, offices and car park at Lewisham Bridge/Mill-rd./Molesworth-st. (M. Rayner).

PADDINGTON.—Planning Applications.—The LCC has received the following town planning applications: Housing scheme (including two 25-storey blocks) at Hall-pl./Hall-pl. west/Braithwaite-st. (BC); private open space at Randolph-ave. (Hunt & Steward).

ST. MARYLEBONE.—Planning Applications.—The following town planning applications have been received by the LCC: New aviary, and new meeting hall and laboratories at Zoological Society Gardens, Regent's Park (Zoological Society of London); reconstruction of Regent's Park Terrace, shops and flats, at Sussex-pl., Park-rd. (Trehearne & Norman, Preston & Ptnrs.); multi-storey car park, flats, shops, showrooms at Bolsover-st./Greenwell-st./Gt. Tichfield-st./Carburton-st. (Riley & Glanfield); new wing for London Clinic, at Harley-st./Devonshire Mews (Trustees of the London Clinic), architects are Gunton & Gunton.

SHOREDITCH.—Planning Applications.—The following town planning applications have been received by the LCC: Flatted factories at Caesar-st. (A. M. Tribich); reconstruction with tower block at City-rd. (G. Baines & Syborn).

WANDSWORTH.—Planning Application.—Barkers Ltd. has forwarded a town planning application to the LCC for 80,000 sq. ft. of office accommodation at 211 Balham High-rd.

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(PROVINCIAL)

ALDERSHOT.—BC propose aged persons' accommodation off York-rd.

ANGLESEY.—CC propose 2nd phase of horticultural section at Pencraig College.

ASHTON-UNDER-LYNE. — The Christ Church Authorities propose extensions to Elgin-st. school.

BAGSHOT.—RDC propose improvements to pre-war houses at Lightwater and Bisley. Est. £58,000.

BANSTEAD.—UDC propose new community hall. Est. £60,000.

BASINGSTOKE.—Hants. CC propose new training centre and hostel.

BATLEY.—West Riding CC propose erection of 14 dwellings at Lea View/Church-rd.

BELFAST. — Electricity Committee has approved the provision of a sub-station to serve the new oil refinery at Sydenham. Est. £265,000.

BLACKPOOL.—BC seeking loan for purchase of site, Warbreck Hill-rd., for future school development. Est. £47,691.

BLYTHE BRIDGE.—Birmingham Regional Hospital Bd. propose erection of staff canteen/recreation hall at Stallington Hall Hospital.

BORDON.—Hants. CC propose overspill housing scheme to accommodate 40,000 people.

BOURNEMOUTH.—TC to build divisional police headquarters at Wimborne-rd., Winton, to cost £40,000.

BRACKNELL.—Development Corporation propose further 255 garages at Priestwood.

BRADFORD. — Following for Leeds Regional Hospital Bd.: Operating theatre at St. Luke's Hospital, £45,000 est.; ENT unit at Royal Infirmary, £507,579 est.

CAMBERLEY.—Rockweld Ltd. propose phase 2 of new office block at Park Farm. Architects: R. J. James & Partners, 6 Lower Grosvenor-pl., London, SW1.

CHADDERTON.—UDC propose erection of adult training centre at Chadderton Park-rd.

CHEADLE & GATLEY.—UDC propose erection of aged persons' flats at Hulme Hall-rd.

CHESTER.—Barclays Bank Ltd. propose erection of offices at junction of Northgate-st./St. Werburgh-st.

CHESTERFIELD.—BC propose erection of art gallery and museum, central library, branch library, at Newbold, during the next five years. Est. £215,000.

CLAYTON-LE-MOORS.—Lancs. EC propose extensions at Mount Pleasant county school, Burnley-rd.

DARLINGTON.—John T. Bell & Sons, builders, Market-st., Newcastle-on-Tyne, are to erect two large shops and four small shops on the Firth Moor estate, Darlington.

DORCHESTER (Oxon).—CoE Auths. propose improvements to Dorchester Abbey. Est. £30,000.

DURHAM.—R. Turley & Associates, 46 Jesmond-rd., Newcastle-on-Tyne, are the architects for the proposed erection of 100 houses at Durham City, for the North-Eastern Housing Association, Windsor Terrace, Newcastle-on-Tyne. . . . The City C are to erect 26 dwellings at Crossgate and 14 at Church-la. City E. is L. E. Ellis.

FARNBOROUGH.—H. H. Hilder Ltd propose erection of 8 shops, 12 flats, workshops and car park, at Farnborough-rd. Est. £80,000. Inquiry held. . . . CoE Auth. propose conversion of the Manor House as a day school. Est. £33,000.

GALWAY.—A new factory is to be built here by Lee Cooper Ltd., of Romford.

GUILDFORD.—BC propose multi-storey car park at Sydenham-rd. . . . Sainsburys Ltd. propose new self service shop and car park at High-st. . . . Debenhams Ltd. propose new departmental store between the new Millbrook-rd. and the river, £1,000,000 est. Architects: George Baines and Syborn.

HENLEY.—RDC seek loan £51,000 for 23 bungalows on various sites.

HIGH WYCOMBE.—Methodist Auth. propose erection of a new church and centre at Desborough-rd. Architects: Alister McDonald & Partners, 10 Bedford-st., London, WC2.

HYDE.—Following for Ches. EC: Classroom extensions at College of Further Education; new county infants' sch. at Gloucester-rd.

KEIGHLEY.—BC propose improvements at Cliffe Castle Park caféteria.

LANCASTER.—TC propose redevelopment scheme, Aldcliffe-rd. area.

LEEDS.—Yorkshire Factoring Co. Ltd. propose erection of warehouse/offices at Westgate. . . . Following for TC: Boys' remand home at Skelton-la., Whinmoor; alterations and extensions at Springvale hostel; maternity and child welfare clinic at Seacroft, £24,000 est.; block of 6 shops and maisonettes over, and garages at Charing Cross estate; 3 blocks of 6 shops and maisonettes over, and garages at Ebor-gdns.; 24 maisonettes and 24 garages at Moor Grange.

LIVERPOOL. — The Liverpool Regional Federation of Building Trades Employers propose erection of lecture hall and offices at Hope-st.

LLANDUDNO.—Following for BC: Aged persons' bungalows at Marl-cres.; gymnasium assembly hall at youth centre. . . . Plans for the erection of 13 bungalows, 13 semi-bungalows, etc., to be built privately at Pennant Court, off Gwydyr-rd., have been approved by Llandudno Council.

MALDEN & COOMBE.—BC propose erection of 22 houses and 10 flats at Yew Tree-cl., Malden-rd.

NORTH RIDING.—Messrs. John T. Bell & Sons, builders, Market-st., Newcastle-on-Tyne, have re-submitted to the North Riding planning authorities, a revised scheme for the erection of 3,000 houses at Hemlington Park, south of Middlesbrough. The first scheme was rejected about 18 months ago.

NOTTINGHAM.—Nottingham RC Diocese propose erection of offices, shop and car park at Derby-rd.

OLDHAM.—Manchester Regional Hospital Bd. propose improvements to staff accommodation at Oldham & District General Hospital.

OXFORD.—University Chest propose extensions to the department of geology. Est. £100,000.

PADIHAM.—G. Parker proposes erection of 12 bungalows and 20 garages.

PARBOLD.—G. Heyes proposes erection of motor car showroom and petrol filling station at Scarisbrick Farm, The Common.

RAWTENSTALL.—BC propose erection of flats at Ormerod-st.

READING.—TC has approved 21 flats at New Lane Hill for McManus & Co. Ltd.

ROCHDALE. — Robert Riley (Holdings) Ltd. propose erection of new factory building.

SALOP.—CC seek Min. approval to purchase land at Montford Bridge, for erection of CP sch.

SHEFFIELD.—The John Lewis Partnership has now received authority from the Sheffield Corporation to commence demolition on the Barker's Pool site on their behalf pending the completion of the projected lease—a new store for Cole Bros.

SLOUGH.—Bucks. CC propose 32 firemen's flats.

SOUTH SHIELDS.—Two youth clubs, costing £20,000, are proposed by the TC. The buildings are expected to be prefabricated structures, and private architects may be appointed. . . . Plans are being prepared by C. K. Luke, 28 Fowler-st, South Shields, for the erection of a warehouse at Maxwell-st. for Mr. F. Stephenson. . . . Plans have been prepared for the erection of a 40,000 sq. ft-factory for the Industrial Estates Management Corporation, Team Valley, Gateshead. Architects: Jack Cotton, Ballard and Blow, 48 Pilgrim-st., Newcastle-on-Tyne.

STANLEY (Co. Durham).—UDC propose crematorium at Mountsett, Dipton. Surveyor is R. H. Snowball.

STRETFORD.—F. W. Berks & Co. Ltd. propose office extensions at Trafford Park-rd. . . . J. H. Fitton proposes erection of 6 shops with 6 flats over 12 garages at junction Barton-rd./King-st. . . . The Rev. J. P. Forrestall proposes erection of church for 600 persons, Presbytery nun's convent with nursery at Glastonbury-rd. . . . AEI Ltd. propose erection of storage premises at Barton Dock-rd.

SWINTON & PENDLEBURY.—BC is discussing with Lancs. CC town planning officer the redevelopment of town centre.

TWICKENHAM.—Planning Committee has recommended approval of plans for the building of six-storey flats at Cross Deep.

WAKEFIELD.—Following for TC: New market hall at Westmorland-st.; 11-storey block of flats at Park-st.; 3-storey block of flats at Monk-st.; housing development at Alverthorpe-rd. . . . Fell Construction Co. Ltd. propose erection of office block at George-st.

WALLINGFORD.—BC propose 26 dwellings at Wigwood Way.

WANTAGE.—UDC propose erection of 35 dwellings at Ormond-rd. . . . Frank Cooper Ltd., Oxford, propose new factory, approx. 30,000 sq. ft., off Grove-rd.

WARRINGTON.—A new 22,000 sq. ft. factory is planned by Metro-Cutanit Ltd., of Warrington, on the site of a former CWS tannery at Grappenhall, Warrington. Architect is J. H. Cheetham, of Ackers-rd., Grappenhall.

WHITBY (Yorks).—UDC are considering a redevelopment scheme for the Tate Hill area.

WIGAN.—The Housing Committee are to build 39 houses and 4 flats, costing £65,335, in Drummond-sq. . . . The Planning Com-

Contracts Placed

We are glad to receive from architects and quantity surveyors for publication details of contracts placed to the value of £20,000 or over. Such information should reach the Editor as soon as possible after the contract is signed. Names of the architect and other consultants associated should be given.

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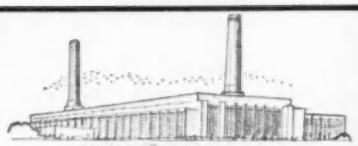

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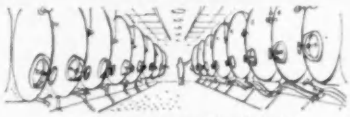

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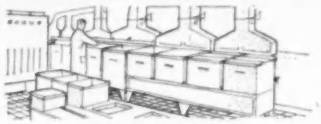

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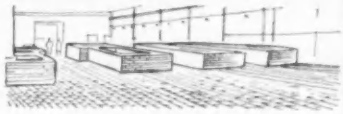

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mittee have approved the erection of a 4-storey office block in Bridgeman-terr., Wigan, by the Norwich Union Insurance Society. . . . The Housing Committee are to build 119 houses at Bottling Wood.

WIRRAL.—Ches. CC are considering erection of new grammar sch. on land between Heswall and Neston.

WOKING.—Regional Hospital Bd. propose extensions to the Victoria Hospital . . . . BC has approved erection of 10-storey block of flats, 10 houses and 10 flats in 3-storey blocks, at Constitution Hill.

TENDERS

(A) Denotes *accepted.*
(PA) Denotes *provisionally accepted.*
(RA) Denotes *recommended for acceptance.*
(AM) Denotes *accepted subject to modification.*
(GD) Denotes *accepted subject to approval by appropriate Government Department.*

ABRAM.—Erection of 32 houses and six flats at Bickershaw No. 12 housing site for UDC. (A) G. & J. Seddon Ltd., Farnworth, £64,634.

ANDOVER. — Erection of 44 houses at London-rd. housing site for BC. (A) W. Marshall (Andover) Ltd., £83,737.

AYLESFORD (Kent).—New research and development centre for the Reed Paper Group. Designed by Group's engineering dept. (A) James Miller & Ptnrs. Ltd., £500,000.

BANSTEAD.—Erection of 242 dwellings at Chapel Way for UDC. (A) S. G. & A. Agomar, 109 Elmers End-rd., Beckenham.

BASINGSTOKE.—Erection of 413 dwellings, 264 garages, roads and sewers at South Ham Estate for BC. (A) J. Anderson & Sons (Building Contractors) Ltd., Orpington, £912,800.

BEBINGTON.—Erection of 23 bungalows and a hostel at Kennet-rd. for BC. (A) W. H. Benbrow & Sons Ltd., Neston, Wirral.

BEDFORDSHIRE.—Fixed price tenders for proposed new county sec. sch., Toddington, for CC. County A is J. C. Barker.

T. & E. Neville Ltd.	£148,112
Thos. Lowe & Sons Ltd.	147,679
Arthur Sanders Ltd.	145,126
A. J. G. Potter & Son	144,212
S. Calverley & Sons (Contractors) Ltd.	141,140
(A) V. M. Hill & Sons (Ampthill) Ltd.	140,158

BEDLINGTON.—Erection of 42 houses to complete housing scheme at Cleasewell, Guide Post, for UDC. Surveyor is A. K. Dennis. (A) Direct labour.

BELFAST.—Erection of a prim. sch. for 560 pupils at New Barnsley Park, Ballymurphy, for City C. (A) Crawford & Laird, 70 Connaught-st., Belfast.

BERKHAMPSTED.—New health centre at Victory-rd. for CC. (A) F. Harrowell & Sons Ltd., 58 Western-rd., Tring.

BIRMINGHAM.—Following for City C: Erection of Bell Holloway special sch. (A) Higgs & Hill Ltd., Coventry, £249,200. Alterations to Colmore jun. and infants' sch. (A) R. Blaynee & Sons Ltd., Birmingham, £23,918. Alterations and extensions to Lea Village sec. sch. (A) J. & F. Wootton Ltd., Walsall, £63,761. Alterations and additions to Stechford prim. sch. (A) E. G. Brown & Sons Ltd., Birmingham 13, £22,315. Erection of Vauxhall Gardens prim. sch. (A) Maddocks & Walford, Birmingham 24, £73,734. Erection of 11 dwellings and 14 garages at Adams Hill, Bartley Green. (A) J. Harris & Son (Builders) Ltd., £26,549. Erection of 17 aged persons' bungalows and five garages at Ley Hill estate. (A) Gilligan Bros. Ltd., Birmingham, £32,781. Erection of four children's homes, 15 houses, and garages at Bartley Green and West Heath areas. (A) Direct labour, £61,314.

BOLTON.—Upgrading of Musgrave Ward at Roval Infirmary for Manchester Regional Hospital Bd. (A) George & Beddows Ltd.

BRADFORD.—New sec. sch. at South Bradford for TC. (A) M. Harrison & Co. (Leeds) Ltd., £345,856.

BLYTH.—Erection of 52 flats and maisonettes at Phoenix-st. for TC. (A) R. C. Comb (Building Contractors) Ltd., 75 Victoria-ter., Whitley Bay.

CHESHUNT (Herts). — Extensions to grammar sch. for CC. (A) Field Davis Ltd., London.

CUMBERLAND.—Police houses at Whitehaven for CC. (A) Cumbria Contractors Ltd.

DARLINGTON.—Erection of the proposed Skerne Park prim. sch. for EC. Borough A. is E. A. Tornbohm. (A) R. Blackett and Son Ltd., Bondgate, Darlington, £46,326.

DISLEY.—Erection of 14 bungalows, with siteworks, at Buxton-rd. for RDC. (A) Hall Bros., New Mills, £22,894.

DRIFFIELD.—Erection of 12 dwellings at Nafferton for RDC. (A) S. Rudd & Son, £21,262.

DURHAM.—Erection of a students' hostel at St. John's College for Durham University. Architects: Cordingley and McIntyre, Owengate, Durham City. (A) Goodyear & Son, Claypath, Durham City.

GATESHEAD.—Erection of a 16-storey block of flats (128 units) between Bensham-rd. and Rectory-rd., Gateshead, for TC. (A) Wimpey and Co. Ltd., Orchard-hse., Fenwick-ter., Newcastle-on-Tyne. Erection of civic restaurant in Park-la. for TC. (A) John T. Bell and Son, Market-st., Newcastle-on-Tyne, £42,400.

LIVERPOOL.—Printing works at Pall Mall for Duttons Ltd. (A) Norwest Construction Co. Ltd. New classroom block at Queen's-dr. for Board of Governors, Liverpool College. (A) Wm. Tomlinson & Sons Ltd. Following for TC: Erection of eight dwellings at Beaufort-st. (A) Tysons' (Contractors) Ltd., £27,608. New day special ESN sch. at Fazakerley. (A) Morrison & Sons Ltd., £107,271. New swimming baths at Quarry Bank High sch. (A) Unit Swimming Pools Ltd., Wolverhampton, £22,232. New assembly hall/classroom block at Greystone Heath approved sch. (A) Osborne & Co. (Warrington) Ltd., £73,740. Erection of Highfield comprehensive sec. sch. (A) Morrison & Sons Ltd., £364,602. Erection of Anfield comprehensive sec. sch. (A) Morrison & Sons Ltd., £468,073.

LONDON (City).—Erection of a six-storey building at St. Mary Axe/Bevis Marks/Goring-st., for York Investments Ltd. Architects: K. Lindy, Joseph Hill & Ptnrs. (A) Wates Ltd., £310,163.

(GD) LONDON (Air Ministry).—*List of new works:* Contracts to the value of £4,000 or over for weeks ended August 4 and 11: *Building work:* Hereford; Lavender McMillan (Contractors) Ltd., Worcester Park, Surrey. Medmenham, Bucks.; James (Builders) Ltd., Slough, Bucks. Scampton, Lincs.; A. Richmond & Sons Ltd., Retford, Notts. Gaydon Lincs.; Bosworth Wakeford & Stepnell Ltd., Rugby, Warwicks. North Coates, Lincs.; R. M. Phillips & Son Ltd., Brigg, Lincs. Benson, Oxford; Thomas Lowe & Sons Ltd., Hammersmith, London, W6. *Artificers' work:* Greatworth, Oxfordshire; Lewis & Watters Ltd., Leamington Spa, Warwicks. Finningley, Yorks.; J. J. Mather & Son Ltd., Stoneferry, Hull. Aberporth, Cardiganshire; W. & A. Davies Ltd., Pontypool, Monmouthshire. Woodbridge, Suffolk; Thomas C. Stewart (Contractors) Ltd., Bury St. Edmunds, Suffolk. Bentwaters (Suffolk), etc.; Thomas C. Stewart (Contractors) Ltd., Bury St. Edmunds, Suffolk. Lakenheath (Suffolk), etc.; Walter Lawrence & Son Ltd., Swaffham, Norfolk. *Low pressure heating installation:* Cosford, Wolverhampton, Staffs.; David Peters (Heating Engineers) Ltd., Rodney-st., Liverpool 1.

(GD) LONDON (War Dept.).—Contracts placed for week ended July 21: *Hampshire:* Building at Middle Wallop; Downer & Bailey Ltd., Salisbury. Sea wall repairs at Gosport; G. E. Farr Ltd., Westbury. Demolition at Aldershot; Charles Griffiths Ltd., Barking. *Lancashire:* Building at Chorley; G. & J. Seddon Ltd.; Manchester. *London:* Heating at SE; Stitson White & Co. Ltd., London, W1. *Monmouthshire:* Building at Beachley; C. Price & Son Ltd.; Abergavenny. *Nottinghamshire:* Heating at Chilwell; F. G. Skerritt Ltd.; Nottingham. *Shropshire:* Building at Donnington; A. & R. Asthury, Cannock. *Warwickshire:* Building at Brauncote; Thomas Bates & Son Ltd., Kenilworth. *Yorkshire:* Heating at Catterick; Sanderson & Co., Leyburn.

MANCHESTER.—Following for Regional Hospital Bd.: Sanitary accommodation at Salford Royal Hospital. (A) Henry Green & Sons Ltd., £37,999. Ante-natal clinic at Withington Hospital. (A) Harry Wimpenny & Sons Ltd., £34,686.

MIDDLESBROUGH. — Structural services, etc., for new pedestrian shopping precinct for Metropolitan Railway Surplus Lands Co. Ltd. Architects: Cartwright Woollatt & Ptnrs. (A) Richard Costain (Construction) Ltd., £186,000.

NEWCASTLE-ON-TYNE. — Erection of child welfare centre at Longbenton for Northumberland CC. (A) R. Anderson Ltd., Stanmore-rd., Newcastle-on-Tyne, £29,550.

NORTHERN IRELAND.—Following for Housing Trust: 145 dwellings and 36 garages with ancillary works at Lisburn. (A) John McMillan & Son, Ltd., Whitehouse, Belfast. 261 dwellings and 42 garages with ancillary works at Rathcoole (Dev. 11A). (A) James Logan & Sons Ltd., Ballyclare, C. Antrim. 32 dwellings and ancillary works at Camross Park, Rathcoole. (A) James Logan & Sons Ltd., Ballyclare. 37 dwellings and 1 shop with ancillary works at Foyle Hill (Dev. III). (A) Michael Canning, Londonderry. 22 dwellings and 11 garages with ancillary works at Elmwood-rd. (A) J. F. Robinson (Strabane) Ltd., Patrick-st., Strabane.

NOTTINGHAM.—New building at Beeston for Ericsson Telephones Ltd. (A) F. Perks & Son Ltd. Extensions to factory at Nottingham-rd., New Basford, for Deroy Ltd. (A) J. Powell & Son (Builders) Ltd.

OSWESTRY. — Ward reconstruction at Orthopaedic Hospital for Birmingham Regional Hospital Bd. (A) W. Watkin & Co. Ltd., £53,972. Aged persons' home at Morda-rd. for Salop. CC. (A) John Hughes (Contractors) Ltd., Wrexham, £66,149.

SALFORD.—Erection of 24 aged persons' flats at Tetlow-la. for Manchester Jewish Housing Association. (A) P. Hamer Ltd., Swinton, Lancs.

SALWICK (Preston).—Laboratory extensions for UK Atomic Energy Auth. (A) J. Gerrard & Sons Ltd., Lancs.

SEAHAM (Co. Durham).—Further coast defence works for UDC. (A) Brims and Co. Ltd., Pandon-bldgs., City-rd., Newcastle-on-Tyne, £103,047.

SHEFFIELD.—Following for TC: New sec. sch. at Park House, Tinsley. (A) J. F. Finnegan & Co. (Sheffield) Ltd. New sec. sch. at Myers-gr. (A) Direct labour, £406,160. New factory at Harleston-st. for the Brightside Engineering Group. (A) W. G. Robson Ltd.

SHREWSBURY.—New aged persons' home at Brierfields for Salop. CC. (A) F. Galliers, £63,660.

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SLOUGH.—New boys' hostel at Britwell estate for LCC. (A) Holland & Hannen and Cubitts Ltd., London.

SOUTHEND-ON-SEA.—Three-storey block of flats and maisonettes at Mendip-cres., Westcliff-on-Sea, for CBC. Boro' A is P. F. Burridge. Quantities by D. B. Coneal & Ptnrs. (A) Douglas Grant & Ptnrs., 62 Finsbury Pavement, London, WC2, £11,369.

SOUTH RUISLIP.—Stationery and printing store and new offices at Long-dr./Victoria-rd. for BEA. Architects: Murray Ward & Ptnrs. (A) Holland & Hannen and Cubitts (Gt. Britain) Ltd., £400,000.

SOUTH SHIELDS.—Erection of the proposed Whitelea county infants' sch. for EC. Architect: J. Smeds, 56a Camden-st., North Shields. (A) Gordon Durham & Co., East Boldon, Co. Durham, £40,325.

STANLEY (Co. Durham).—Factory alterations at Greencroft for Messrs. Ransome and Marles Ball Bearings Ltd. Architects: J. H. Napper and Partners, 133 Osborne-rd., Newcastle-on-Tyne. (A) John Laing and Son, Norham-hse., New Bridge-st., Newcastle-on-Tyne.

STOKE-ON-TRENT. — Operating theatre suite at North Staffs. Royal Infirmary for Birmingham Regional Hospital Bd. (A) Sambrook (Burslem) Ltd., £22,918.

SURREY.—Following for CC: Assembly hall, gymnasium and changing rooms at Mitcham county sch. for girls. (A) Herbert Kennard Ltd., London, £21,523. Laboratory at Godalming county sch. (A) Godalming Building & Construction Co. Ltd., Guildford. Extensions at Morden Farm county sch. (A) Caffin & Co. Ltd., London. Extensions at Guildford county sch. for girls. (A) R. Durtnell & Sons Ltd., £87,330.

TYRONE.—Erection of a prestressed concrete bridge over River Foyle at Lifford for CC. (A) Farrans Ltd., Dunmurry, Belfast, £104,588.

WAKEFIELD.—Extensions to Providence Mills, Westgate, for Geo. Lee & Sons Ltd. (A) A. Clifford Green Ltd.

WALTON-ON-THAMES.—Redevelopment of the Walton Studios site for Park Investments Ltd. (A) Geo. Wimpey & Co. Ltd., London.

WATFORD.—Extensions to juvenile court and additional office accomodation at Courthouse for Herts. CC. (A) G. Wiggs & Son, St. Albans-rd., Watford. Youth wing at Victoria girls' SM sch. (A) Jesse Mead Ltd., Chesham.

WORKINGTON.—Erection of 120 dwellings at various areas for BC. (A) Thomas Armstrong Ltd., Cockermouth, £156,058.

WORTLEY. — Erection of 18 flats at Oughtibridge for RDC. (A) Corbett Bros. Ltd.

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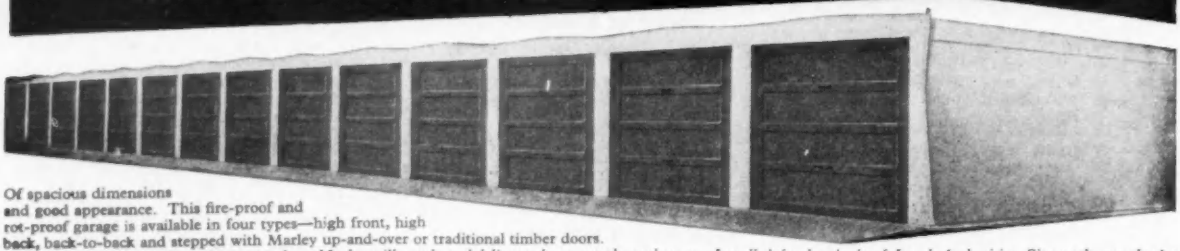

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MODERNISATION PRE-WAR FLATS, PETERSFIELD HOUSE (19 FLATS), LANDPORT.

TENDERS are invited for THIS WORK, applications for Tender documents should be sent to the Director of Housing, 1 Clarence-parade, Southsea, not later than 1st SEPTEMBER, 1961, with a deposit of £1 returnable upon receipt of bona fide Tenders or return of all documents within three days.

The Council do not bind themselves to accept the lowest or any Tender. It is a condition of tendering that the Contractor shall at the date of Tender have in his employment not less than one indentured apprentice to every eight craftsmen who were employed by him on the previous 1st January.

J. R. HASLEGRAVE,
Town Clerk.

RSM/EVM
28th July, 1961.

EAST SUSSEX
COUNTY COUNCIL.

CROWBOROUGH BRANCH LIBRARY

TENDERS are to be invited for the erection of a Branch Library at Crowborough.

Contractors wishing to tender should apply before 23rd AUGUST, 1961, to the County Architect, County Hall, Lewes.

Selected Contractors will be provided with Bills of Quantities on 1st SEPTEMBER, 1961.

FRIMLEY AND CAMBERLEY
URBAN DISTRICT COUNCIL.

OVERSPILL HOUSING SCHEME.

TENDERS are invited for the construction of 132 dwellings (traditional type) on Old Dean Common Estate, Camberley.

Bills of Quantities, etc., may be obtained from Messrs. Close and Morton, 20-22 High-street, Camberley, up to 29th August, 1961.

Tenders are to be delivered to the undersigned in plain sealed envelopes not later than NOON on TUESDAY, 17th OCTOBER, 1961.

The Council does not bind itself to accept the lowest or any tender.

K. S. HARVEY,
Clerk of the Council.

Municipal Buildings,
London-road,
Camberley, Surrey.
9th August, 1961.

WOODSTOCK
BOROUGH.

Demolition Contractors or Building Contractors are invited to submit TENDERS for the DEMOLITION OF A GROUP OF NINE COTTAGES at St. Andrew's-square, Woodstock. Application should be made for plans, specification and form of Tender to Harry W. Smith & Son, F/A.R.I.B.A., Chartered Architects, 29 George-street, Oxford, and must be accompanied by a deposit cheque for £2 2s. made payable to the Borough of Woodstock, which will be returned on receipt of a bona fide Tender not subsequently withdrawn or the return of Tender documents. Tenders will be due approximately ONE MONTH after the date of this notice and work can commence on acceptance of a Tender. The Council do not bind themselves to accept the lowest or any Tender.

VICTOR N. TOLLEY,
Town Clerk.

Town Clerk's Office,
Woodstock,
Oxford.
9th August, 1961.

SOUTHEND-ON-SEA
COUNTY BOROUGH.

PROPOSED GARAGE FOR 40 VEHICLES,
CENTRAL CLEANSING DEPOT,
TO BUILDING CONTRACTORS.
TENDERS.

Contractors desiring to TENDER for this project are invited to submit their names to the Borough Architect, 30 Alexandra-street, Southend-on-Sea, not later than MONDAY, 4th SEPTEMBER, 1961, accompanied by details of similar works previously undertaken and names of Architects from whom references may be obtained.

The Contract comprises the ERECTION OF A SINGLE-STOREY STEEL-FRAMED GARAGE of about 11,000 feet super with brick and asbestos cladding and pitched asbestos roof, hardstanding, drainage, and works incidental thereto.

From such applications a selected list of Tenderers will be made by the Committee and those selected will be notified and will be required to make a payment of a deposit of £2.

Upon receipt of this deposit, the Bills of Quantities and Form of Tender will be forwarded, and it is anticipated that these will be available mid September, 1961. The deposit of £2 will be refunded on receipt of a bona fide Tender *or* the return of all loaned documents.

The Corporation do not bind themselves to accept the lowest or any Tender.

ARCHIBALD GLEN, Town Clerk.

NAPSBURY
HOSPITAL MANAGEMENT COMMITTEE.

The Management Committee invite TENDERS for the EXTENSION OF THE STAFF SOCIAL CLUB PREMISES. Application for Drawings, Bills of Quantities and Form of Tender should be forwarded to Michael Meacher, Esq., A.R.I.B.A., 1 College-street, St. Albans, Herts., by 22nd AUGUST, 1961.

Sealed Tenders must be delivered to the undersigned not later than 25th SEPTEMBER, 1961, and marked in the top left-hand corner of the envelope "Social Club." The Management Committee does not bind itself to accept the lowest or any Tender.

F. MORRIS,
Group Secretary.

Napsbury Hospital,
St. Albans,
Herts.

SOUTHEND-ON-SEA
COUNTY BOROUGH.

TO BUILDING CONTRACTORS.
PROPOSED LAVATORY EXTENSIONS, BOURNEMOUTH PARK-ROAD JUNIOR SCHOOL, SOUTHEND-ON-SEA.
TENDERS.

Contractors desiring to TENDER for this project are invited to submit their names to the Borough Architect, 30 Alexandra-street, Southend-on-Sea, not later than FRIDAY, 1st SEPTEMBER, 1961, accompanied by details of similar works previously undertaken and names of Architects from whom references may be obtained.

The Contract comprises the ERECTION OF THREE SINGLE-STOREY TOILET BLOCKS abutting existing buildings of a total floor area of about 600 feet super, of brick construction and timber flat roofs, ALTERATIONS TO EXISTING CLASSROOMS about 900 feet super, to form Lavatories and Cloakroom, DEMOLITION OF EXISTING EXTERNAL LAVATORIES AND WORKS INCIDENTAL THERTO.

From such applications a selected list of Tenderers will be made by the Committee and those selected will be notified and will be required to make a payment of a deposit of £2.

Upon receipt of this deposit, the Bills of Quantities and Form of Tender will be forwarded, and it is anticipated that these will be available early January, 1962. The deposit of £2 will be refunded on receipt of a bona fide Tender *or* the return of all loaned documents.

The Corporation do not bind themselves to accept the lowest or any Tender.

ARCHIBALD GLEN, Town Clerk.

WORCESTER CITY.

ERECTION OF ONE HUNDRED AND FIFTY-SIX DWELLINGS, WARNDON ESTATE.

TENDERS are invited for the ERECTION OF THESE DWELLINGS COMPRISING TRADITIONAL BRICK-BUILT 3-STOREY BLOCKS OF ONE BEDROOM FLATS AND TWO BEDROOM FLATS.

Documents obtainable from City Engineer and Surveyor, 22 Bridge-street, Worcester, on deposit of three guineas (cheques payable to "Worcester Corporation") which will be refunded after receipt of a bona fide Tender and the return of Tender documents.

Tenders to be posted to the Town Clerk to arrive not later than MONDAY, 18th SEPTEMBER, 1961.

BERTRAM WEBSTER,
Town Clerk.

Guildhall,
Worcester.

HAMPSHIRE
COUNTY COUNCIL.

HAVANT AND WATERLOO
URBAN DISTRICT COUNCIL.

HEALTH CLINIC, COMMUNITY CENTRE AND AMBULANCE STATION,
LEIGH PARK, HAVANT.

TENDERS are invited from suitable firms for the SECOND PHASE (SUPERSTRUCTURE WORK) of this contract. The first phase of the contract relating to the construction of the foundation and drainage work has been completed.

Applications for Tender documents, accompanied by a deposit of two guineas payable by cheque to "Hampshire County Council" should be sent to the Clerk of the County Council by 5th SEPTEMBER, 1961. The deposit will be refunded on receipt of a bona fide Tender or the return of the documents.

Tender documents will be available on the 8th September, 1961, and Tenders must be delivered to the Clerk of the County Council by not later than 12 NOON on the 9th OCTOBER, 1961.

The two authorities do not bind themselves to accept the lowest or any Tender.

G. A. WHEATLEY,
Clerk of the County Council.

The Castle,
Winchester.

B. R. W. GOFTON,
Clerk of the Urban District Council.

BASILDON
URBAN DISTRICT COUNCIL.

WINIFRED-ROAD HOUSING ESTATE, PITSEA, BASILDON.
ERECTION OF 42 GARAGES IN 6 BLOCKS.

TENDERS will shortly be invited for the above and interested contractors should apply for documents to the Council's Engineer and Surveyor, 88 Town-square, Basildon, by 4th SEPTEMBER, 1961. Applications should be accompanied by a deposit of £2 2s. (refundable).

SALE
BOROUGH.

CONTRACT 2/1961.
ROEBUCK-LANE AND HOLLINS-GROVE DEVELOPMENT.

FIRM-PRICE TENDERS are invited under one contract for the ERECTION of the following :

(a) 2 NO. TWO-STOREYED BLOCKS TOTALLING 32 AGED PERSONS' FLATLETS AND INCLUDING WARDEN AND COMMUNAL ACCOMMODATION. 2 NO. TWO-STOREYED BLOCKS TOTALLING 16 FLATS, also ancillary and minor road works.

(b) 1 NO. TWO-STOREYED BLOCK CONTAINING 8 FLATS on a site approximately ¼ mile distance from (a).

Drawings may be inspected and Bills of Quantities and Form of Tender obtained from the Borough Engineer's Department, Town Hall, Sale, on payment of £2 2s. deposit.

Tenders must be delivered to the Town Clerk, Sale, in the envelope provided for that purpose, endorsed "Tender—Roebuck-lane and Hollins-grove Development" so as to reach him not later than 10 a.m. on TUESDAY, 5th SEPTEMBER.

The Corporation does not bind itself to accept the lowest or any tender.

BERTRAM FINCH,
Town Clerk.

Town Hall,
Sale.

BRISTOL
CITY AND COUNTY.

FIRE BRIGADE COMMITTEE.
TO BUILDING CONTRACTORS.

Fire Brigade Committee invite TENDERS for revised scheme for ERECTION OF THREE-BAY FIRE STATION at Clothier-road, Brislington, Bristol, 4.

Alternative Tenders required for (a) fixed price and (b) with fluctuations clause.

Contractors willing to submit Tenders based on Bills of Quantities apply to City Architect, Council House, Bristol, 1, by 22nd AUGUST.

BIRMINGHAM CITY.

HOUSING MANAGEMENT DEPARTMENT.
REPAIRS INSPECTORS.

Duties include ordering and supervision of repair work and preparation of Schedules for reconditioning of substandard dwellings. Salary within the range £645-£960 according to qualifications and experience. Pension Scheme (including Widows and Orphans). Medical examination. Application forms from the undersigned.

J. P. MACEY,
Housing Manager.

Housing Management Department,
Bush House,
Broad-street,
Birmingham, 1.

JARROW
BOROUGH.

HOUSING SCHEME NO. 105 :
111 DWELLINGS,
HEDWORTH ESTATE,
NEAR JARROW.

Quantities are in course of preparation for the above scheme and Contractors desirous of TENDERING are invited to send their names, together with a deposit of £2 2s. (which will be returned on receipt of a bona fide Tender or the return of all the documents) to the Borough Engineer, Town Hall, Jarrow, not later than 26th AUGUST, 1961. Date for receipt of Tenders will be notified when Quantities are issued.

M. L. ROTHFIELD,
Town Clerk.

ENFIELD
BOROUGH.

12 THREE-STOREY FLATS,
22 HOUSES AND 34 GARAGES,
FERNS NURSERY ESTATE.

Building Contractors desirous of TENDERING FOR THE ERECTION OF 12 THREE-STOREY FLATS, 22 HOUSES AND 34 GARAGES at the Ferns Nursery Estate, Enfield, should apply to the Borough Engineer and Surveyor, Mr. H. Deryck Peake, M.Sc.(Eng.), M.I.C.E., 7 Little Park-gardens, Enfield, by first post TUESDAY, 22nd AUGUST, 1961. Bills of Quantities and Forms of Tender will be forwarded on or about the 25th AUGUST, 1961.

All applications must be accompanied by a deposit of £2 2s., to be returned on receipt of a bona fide tender addressed to the undersigned and/or return of all documents.

Plans and Conditions of Contract may be inspected at the offices of the Borough Engineer as aforesaid on or after the 28th AUGUST, 1961, on Mondays to Fridays between the hours of 9 a.m. and 12.30 p.m.

Tenders must reach the undersigned not later than noon on MONDAY, the 18th SEPTEMBER, 1961, and no tender will be received except in a plain envelope which must be sealed and must bear the words "Tender for 12 Flats, 22 Houses and 34 Garages, Ferns Nursery Estate, Enfield," but shall not bear any name or mark indicating the sender.

The Council do not bind themselves to accept the lowest or any tender.

Contractors tendering will be required to submit particulars of similar works which have been carried out by them.

CYRIL E. C. R. PLATTEN,
Town Clerk.

Civic Centre,
Enfield,
Middx.

WORCESTER CITY.

RE-ADVERTISEMENT.

TENDERS.
ERECTION OF TEN DWELLINGS, POWELL'S-ROW REDEVELOPMENT AREA, ST. JOHNS.

TENDERS are invited for the ERECTION of these dwellings comprising traditional brick-built 2-storey blocks of one-bedroom flats.

Documents obtainable from City Engineer and Surveyor, 22 Bridge-street, Worcester, on deposit of three guineas (cheques payable to "Worcester Corporation") which will be refunded after receipt of a bona fide tender and the return of tender documents.

Tenders to be posted to the Town Clerk to arrive not later than MONDAY, 18th SEPTEMBER, 1961.

BERTRAM WEBSTER,
Town Clerk.

Guildhall,
Worcester.

ABERYSTWYTH
BOROUGH COUNCIL.

TENDER FOR THE INTERIOR DECORATION OF THE KING'S HALL, ABERYSTWYTH.

TENDERS are invited for the INTERIOR DECORATION of the King's Hall, Aberystwyth. Particulars and Forms of Tender may be obtained from the Borough Surveyor, Park-avenue, Aberystwyth.

Sealed Tenders, endorsed "King's Hall Decoration," must be addressed to me and received at my office not later than MONDAY, 11th SEPTEMBER, 1961.

W. P. DAVIES,
Town Clerk.

Town Hall,
Aberystwyth.
3rd August, 1961.

BASILDON
URBAN DISTRICT COUNCIL.

ERECTION OF 56 3-BEDROOM MAISONETTES IN 4-STOREY BLOCKS AT VICTORIA-ROAD, LAINDON, ESSEX.

Experienced Contractors should apply for Tender documents to Engineer and Surveyor, 88 Town Square, Basildon, by 1st SEPTEMBER. Applications must be accompanied by a £2 2s. deposit (refundable).

PORTSMOUTH CITY.

TENDERS, on Bills of Quantities, are invited for ADDITIONS AND ALTERATIONS AT POLICE HEADQUARTERS, Queen's-crescent.

Contractors should apply for documents to the City Architect, 1 Western-parade, Portsmouth, not later than 28th AUGUST, 1961, enclosing a deposit of £1, which will be refunded on receipt of a bona fide Tender or the return of all the documents WITHIN THREE DAYS.

The Council do not bind themselves to accept the lowest or any Tender. It is a condition of tendering that the Contractor shall, at the date of his Tender, have in his employment not less than one indentured apprentice to every eight craftsmen who were employed by him on the previous 1st January.

HUYTON-WITH-ROBY
URBAN DISTRICT COUNCIL.

BLUEBELL-LANE HOUSING ESTATE.

Contractors wishing to submit a FIXED PRICE TENDER for any or all of the undermentioned schemes are invited to apply for permission to tender. Applications, stating for which scheme(s) they wish to tender, to be addressed to the Architect and Housing Director, "Grasscroft," Archway-road, Huyton, and received by 24th AUGUST, 1961.

(a) 52 THREE-BEDROOMED HOUSES
(b) 53 THREE-BEDROOMED HOUSES
(c) 42 THREE-BEDROOMED HOUSES
(d) 35 THREE-BEDROOMED HOUSES and 150 THREE-STOREY FLATS.

Bills of Quantities will be issued on or about 31st August, 1961.

The Council does not bind itself to accept the lowest or any Tender.

D. WILLGOOSE,
Clerk of the Council.

Council Offices,
Derby-road,
Huyton.

GLOUCESTERSHIRE
COUNTY COUNCIL.

CHIPPING CAMPDEN GRAMMAR SCHOOL EXTENSIONS.

Applications for Bills of Quantities, with deposit of £2 2s. returnable upon receipt of a bona fide FIXED PRICE TENDER, to reach County Architect, Shire Hall, Gloucester, by 28th AUGUST, 1961.

The work will be in traditional construction consisting of PRACTICAL AND ADMINISTRATION BLOCKS, ASSEMBLY HALL, GYMNASIUM, COVERED PLAY AREA AND TWO-STOREY SCIENCE AND CLASSROOM BLOCKS, having a total floor area of approximately 85,000 sq. ft.

The Council does not bind itself to accept the lowest or any Tender.

GUY H. DAVIS,
Clerk of the County Council.

SOUTHBOROUGH
URBAN DISTRICT COUNCIL.

ERECTION OF NEW DRESSING ROOMS.

TENDERS are invited for the PROVISION AND ERECTION OF NEW DRESSING ROOMS ON THE YEW TREE-ROAD PLAYING FIELDS, Southborough.

Specification, plan and form of Tender may be obtained from the Surveyor, Council Offices, Southborough, Kent.

Tenders in plain sealed envelopes endorsed "Tender for new Dressing Rooms" should be delivered to the undersigned not later than 11th SEPTEMBER, 1961.

J. R. NICHOLSON,
Clerk of the Council.

Council Offices,
Southborough,
Tunbridge Wells,
Kent.

EAST SUSSEX
COUNTY COUNCIL.

HEATHFIELD FIRE STATION.

TENDERS are to be invited for the ERECTION OF A RECREATION ROOM WITH KITCHEN AND SANITARY ACCOMMODATION.

Contractors wishing to tender should apply before 25th AUGUST, 1961, to the County Architect, County Hall, Lewes, Sussex.

Selected Contractors will be provided with specification and Tender documents on 2nd September, 1961

ESSEX
COUNTY COUNCIL.

FARMWORKER'S COTTAGE, BRETTS FARM, AVELEY.

The Smallholdings Committee invite firm price TENDERS from Building Contractors with suitable organisation for the ERECTION OF A FARMWORKER'S COTTAGE at Bretts Farm, near Aveley.

Bills of Quantities and Form of Tender may be obtained from the County Land Agent and Valuer, 69 Duke-street, Chelmsford. Plans may also be inspected at his office or at the farm.

No Tender will be considered unless contained in the envelope provided and delivered to the undersigned not later than 12 NOON on THURSDAY, 7th SEPTEMBER, 1961.

The County Council does not bind itself to accept the lowest or any Tender.

CHRISTIAN BERRIDGE,
Clerk of the County Council.

County Hall,
Chelmsford.
August, 1961.

LLANELLY
BOROUGH.

TO BUILDING CONTRACTORS.

TENDERS are to be invited on a fixed price basis for the ERECTION AND COMPLETION OF 66 THREE-BEDROOM HOUSES IN PAIRS, EIGHT ONE-BEDROOM BUNGALOWS AND TWO SHOPS on the Llwynwhilwg Site, Llanelly.

The specification and drawings, etc., will be sent to contractors on or about the 15th September, 1961, and will those desiring to Tender make application to R. J. Birchall, A.R.I.B.A., Borough Architect, 5 Goring-road, Llanelly, before that date accompanied by a deposit of £2 2s. 0d. returnable upon receipt of a bona fide Tender which is not withdrawn.

Tenders are to be submitted approximately three weeks after receipt of documents on a date to be notified.

The successful Tenderer will be invited to negotiate a Tender for the subsequent development of the site comprising approximately a further 200 dwellings, documents for which will be ready in December, 1961, with an anticipated commencing date of April, 1962.

The Council does not bind itself to accept the lowest or any Tender.

S. SAMUEL,
Town Clerk.

Town Hall,
Llanelly.
11th August, 1961.

LINCOLN
COUNTY.

PARTS OF KESTEVEN COUNTY OFFICES, SLEAFORD—EXTENSIONS.

Contractors interested in carrying out the BUILDER'S WORK IN CONNECTION WITH THE ERECTION OF TWO PREFABRICATED OFFICES at the County Offices, Sleaford, are invited to submit their NAMES to the County Architect, County Offices, Sleaford, Lincolnshire, not later than the 1st SEPTEMBER, 1961.

Selected firms will be supplied with Tender documents and must submit their TENDERS, addressed to the undersigned, by not later than 10 a.m. on the 26th SEPTEMBER, 1961.

J. E. BLOW,
Clerk of the County Council.

County Offices,
Sleaford,
Lincolnshire.
14th August, 1961.

KINGSTON-ON-THAMES
ROYAL BOROUGH.

ACRE-ROAD REDEVELOPMENT, BLOCK "A" FOUR-STOREY 17 TWO-BEDROOM MAISONETTES.

The Corporation proposes shortly to invite TENDERS from a selected list of Contractors for the above work which forms the first stage of a redevelopment scheme that will include:—

MULTI-STOREY RESIDENTIAL BLOCKS, SERVICE ROADS, PARKING BAYS AND/OR GARAGES, LANDSCAPING, ETC.

Contractors who have the necessary organisation, plant and labour force to carry out development of this nature and who would be prepared to Tender for subsequent development during the erection of Block "A" are requested to make application on or before 31st AUGUST, 1961.

Tenderers will be selected from those who apply and Tendering will be on a fixed price basis.

Further details of the redevelopment generally can be obtained upon written application to the Borough Surveyor.

The Corporation do not bind themselves to accept the lowest or any Tender.

L. V. POWELL,
Town Clerk.

Guildhall,
Kingston-upon-Thames.

ESHER
URBAN DISTRICT COUNCIL.

ERECTION OF 48 DWELLINGS COMPLETE WITH GARAGES, LITTLEHEATH FARM ESTATE, OXSHOTT.
CONTRACT NO. 295.

The Council are prepared to receive TENDERS for the ERECTION OF 22 PAIRS OF TWO-STOREY THREE-BEDROOM HOUSES AND ONE TWO-STOREY BLOCK OF FOUR TWO-BEDROOM FLATS, ALL WITH GARAGES ATTACHED OR ADJACENT.

Form of Tender and Bills of Quantities for the whole of the works may be obtained from the Engineer and Surveyor and Planning Officer, Council Offices, Esher, on payment of a deposit of two guineas, which will be refunded on receipt of a bona fide Tender, together with the return of all documents in good condition.

Tenders on the prescribed form, enclosed in the envelope provided, endorsed "Contract No. 295" and bearing no name or mark indicating the sender must be addressed to and received by the undersigned not later than 5 p.m. on MONDAY, 11th SEPTEMBER, 1961.

The Council does not bind itself to accept the lowest or any Tender received.

FREDERICK EDWARDS,
Clerk of the Council.

Council Offices,
Esher,
Surrey.

DAGENHAM
BOROUGH

EXTENSION TO MUNICIPAL OFFICES

Building Contractors possessing a substantial organisation and who are willing to TENDER for the ERECTION OF THE ABOVE are invited to submit their names and give full details. From these names a panel of contractors will be chosen and provided with Tender documents, which are expected to be available by the end of August, 1961.

The work comprises the ERECTION OF A THREE-STOREY STEEL FRAMED OFFICE BLOCK WITH A CONNECTING BRIDGE TO THE EXISTING BUILDING AND SUNDRY INTERNAL ALTERATIONS TO THE EXISTING PREMISES.

Applications to reach the Borough Surveyor not later than 25th AUGUST, 1961.

KEITH LAUDER,
Town Clerk.

Civic Centre,
Dagenham.

SOUTHPORT
COUNTY BOROUGH.

The Council invite TENDERS for the ERECTION OF TWO AGED PERSONS' DWELLINGS in traditional brick construction, on the Grantham-close Housing Site, Birkdale.

The Bills of Quantities may be obtained from, and the drawings and conditions of contract inspected at the Borough Architect and Town Planning Officer's Department, 99-105 Lord-street, on payment of Two Guineas, which sum will be refunded on receipt of a bona fide Tender.

Tenders to be delivered to the undersigned not later than 15th SEPTEMBER, 1961.

R. EDGAR PERRINS,
Town Clerk.

Town Hall,
Southport.

HAVANT AND WATERLOO
URBAN DISTRICT COUNCIL.

Invite TENDERS for the ERECTION OF A BLOCK OF EIGHT FLATS AND FOUR HOUSES TOGETHER WITH DRAINAGE AND EXTERNAL WORKS, at Forest End, Waterlooville.

Conditions of Contract may be inspected at the offices of the Engineer and Surveyor, 1 Park-road North, Havant, from whom forms of Tender and Bills of Quantities may be obtained.

No Tender will be received except in a plain sealed envelope which must bear the word "Tender" followed by the subject to which it relates, but shall not bear any name or mark indicating the sender.

Tenders must be delivered not later than NOON on TUESDAY, 5th SEPTEMBER, 1961, to the Clerk of the Council, Town Hall, Havant.

The Council do not bind themselves to accept the lowest or any Tender.

WALSALL
COUNTY BOROUGH.

DRILL AND HOSE-DRYING TOWER BLOXWICH FIRE STATION.

TENDERS are invited for the ABOVE PROJECT.

Tenders must be sent in a sealed envelope addressed to the Town Clerk, Council House, Walsall, and bearing the words "Tender for Drill and Hose-drying Tower, Bloxwich Fire Station" to be received not later than midday on MONDAY, 4th SEPTEMBER, 1961.

Any Tender received after the time stated or otherwise than in an envelope endorsed as required may be rejected.

An envelope suitably addressed and endorsed will be supplied with the Form of Tender, and it is desired that this envelope be used.

The Council do not bind themselves to accept the lowest or any Tender.

Applications for Tender documents, together with a £2 2s. 0d. deposit should be sent to the Borough Engineer and Surveyor, Council House, Walsall. The deposit will be refunded on the return of the Tender documents or the receipt of a bona fide Tender

MANSFIELD
BOROUGH

RAVENSDALE HOUSING ESTATE.
CONTRACT 25A—10 TRADITIONAL BUNGALOWS.

TENDERS are invited for the ERECTION OF 10 ONE-BEDROOM TRADITIONAL BUNGALOWS.

Drawings may be inspected and Bills of Quantities, Forms of Tender, General Conditions of Contract and other relevant documents obtained from E. T. Crowe, B.Sc., A.M.I.C.E., Borough Engineer and Surveyor, Carr Bank, Mansfield, on payment of a deposit of two guineas (£2 2s. 0d.) made payable to the Town Council of Mansfield, which will be refunded on receipt of a bona fide Tender not subsequently withdrawn, or the return of all loaned documents.

Tenders will only be considered if they are submitted in the envelope provided, which will be suitably endorsed and addressed. This must be sealed and delivered to the undersigned not later than 12 NOON on WEDNESDAY, 20th SEPTEMBER, 1961.

The Corporation does not bind itself to accept the lowest or any Tender and the provisional acceptance of a Tender will be subject to the approval of the Minister of Housing and Local Government.

A. C. SHEPHERD,
Town Clerk.

Carr Bank,
Mansfield.

WORCESTERSHIRE
COUNTY COUNCIL.

Contractors are invited to apply for permission to TENDER for PROPOSED EXTENSIONS at Kidderminster Girls' High School. Applications should reach L. C. Lomas, F.R.I.B.A., County Architect, 14 Castle-street, Worcester, not later than 28th AUGUST, 1961, and where contractors applying have not previously carried out major works under the County Architect, they are required to submit details of single contracts costing at least £85,000 which they have completed recently, together with the names of the Architects responsible. (Q55.)

WEST RIDING OF YORKSHIRE
COUNTY COUNCIL.

TENDERS are invited from Building Contractors for FORMING OF RURAL STUDIES UNIT, etc., at Bentley High-street Secondary School.

Plan and Specification are available on application to the Divisional Architect, Planet-road, Adwick-le-Street, Nr. Doncaster.

Sealed Tenders must be addressed to the undersigned and received at Room 5, County Hall, Wakefield, not later than 9 a.m. on TUESDAY, the 19th SEPTEMBER, 1961.

BERNARD KENYON,
Clerk of the County Council.

WOKINGHAM
BOROUGH

ERECTION OF 22 GARAGES.

TENDERS are invited for the ERECTION OF 22 GARAGES IN TWO BLOCKS, TOGETHER WITH SHORT SERVICE ROAD AND CONCRETE APRON. Contract documents, plans, etc., may be obtained from the Borough Surveyor. Tenders should be received by the undersigned not later than MONDAY, 11th SEPTEMBER, 1961.

L. GODDARD SMALLEY,
Town Clerk.

Town Hall,
Wokingham,
Berks.
18th August, 1961.

PUBLIC APPOINTMENTS

MALDEN AND COOMBE
BOROUGH.

APPOINTMENT OF JUNIOR ARCHITECTURAL ASSISTANT.

Applications are invited for the above appointment from persons who have passed the R.I.B.A. Intermediate Examination, or its equivalent. The salary will be in accordance with Grade A.P.T. II (£815-£960 per annum, plus London "Weighting").

Application on forms to be obtained from John Apse, A.M.I.C.E., Borough Engineer and Surveyor, Municipal Offices, New Malden, Surrey, should be returned by not later than 4th SEPTEMBER, 1961.

HAROLD E. BARRETT,
Town Clerk.

Municipal Offices,
New Malden,
Surrey.

SHEFFIELD
REGIONAL HOSPITAL BOARD.

ARCHITECTURAL DEPARTMENT, CLERK OF WORKS.

Applications are invited for appointment as CLERK OF WORKS with responsibility for supervision of capital (building) works at a number of hospitals in the Derby and Nottingham area of the Sheffield Region.

Candidates must have served an apprenticeship in one of the recognised building trades and have had previous experience as a Clerk of Works on large schemes.

Salary according to experience within the scale £800 x £40 (5) x £50 (1)—£1,050 per annum. Travelling expenses payable for journeys between contracts. Ownership of a car an advantage.

Applications on the official form (to be received not later than 26th AUGUST) available from The Secretary, Sheffield Regional Hospital Board, Fulwood House, Old Fulwood-road, Sheffield, 10.

SOUTHAMPTON
COUNTY BOROUGH.

Applications are invited for the following appointments:—

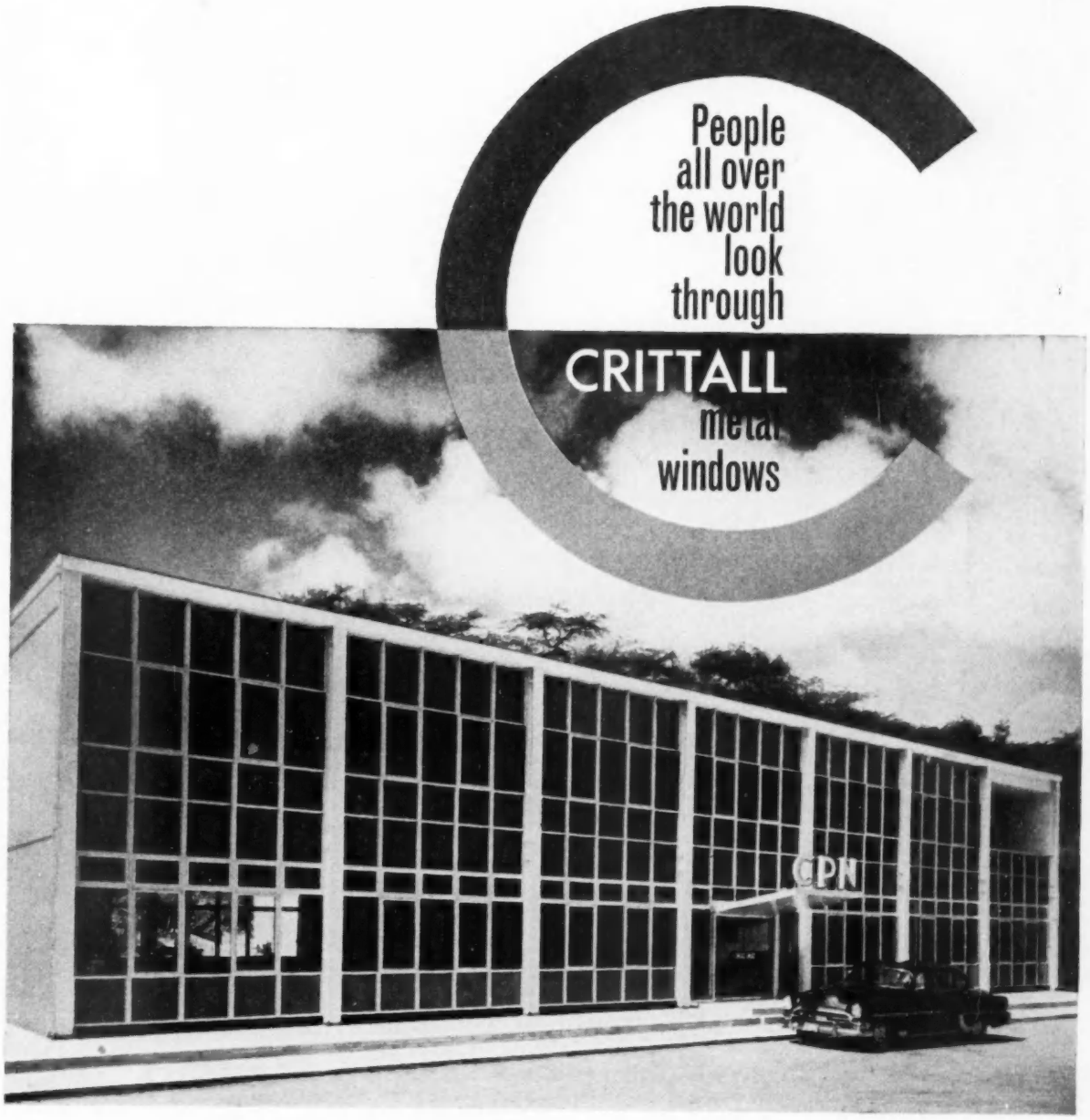
(a) ASSISTANT ARCHITECT, Grade A.P.T. V (£1,310-£1,480), for duties in connection with an extensive and varied programme of housing development including multi-storey flats. Applicants must hold the qualification A.R.I.B.A. with wide experience in the design and administration of major building works.

(b) ASSISTANT ARCHITECT, Grade A.P.T. III/IV (£960-£1,310), for duties in connection with housing estate development. Applicants must have passed Parts I and II of the R.I.B.A. final examination. Commencing salary according to experience and qualifications.

The appointment is subject to N.J.C. conditions of service.

Housing accommodation available in approved cases and approved removal expenses reimbursable up to a maximum of £50.

Application forms from the Borough Engineer and Surveyor, Civic Centre, Southampton, returnable by MONDAY, 4th SEPTEMBER, 1961.



Crittall products have in the past year been exported from the United Kingdom factories of the Company to no less than eighty-one countries throughout the world.

C.P.N. BUILDING, CURAÇAO. Architect: Ben Smit, B.N.A. An example of curtain walling in aluminium (scheme B). Several different types of Crittall curtain walling, in aluminium and in steel, are available to meet the varied requirements of this form of construction. Write for leaflet No. 241H.

THE CRITTALL MANUFACTURING CO. LTD · BRAINTREE · ESSEX

TBW 151

NOW YOU CAN HAVE IT BOTH WAYS!

Witlor have been appointed official distributors and stockists of the BHC range of Hoisting Equipment. Operators can now have it both ways; the best equipment with the best service

BHC Hoists and winches are outstanding in strength, design and performance. The BHC range from Witlor includes:

Moonraker Tower Hoist 15-50 cwt. 100/230 ft. min.	Witlor Brochure D1
Centre Slung Hoist 10-40 cwt. 150/225 ft. min.	Witlor Brochure F1
Automatic Concrete Elevator Capacity 12½ x 18 cu. ft.	Witlor Brochure D1
Ant Queen Mobile Hoist Capacity 10 cwt.	Witlor Brochure B1
Saga Junior and Scaffold Jib Crane Capacity up to 5 cwt.	Witlor Brochure A1
Saga Power Winches Diesel or Electric	Witlor Brochure C1

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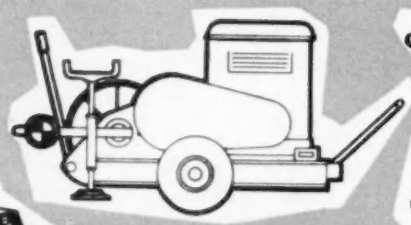

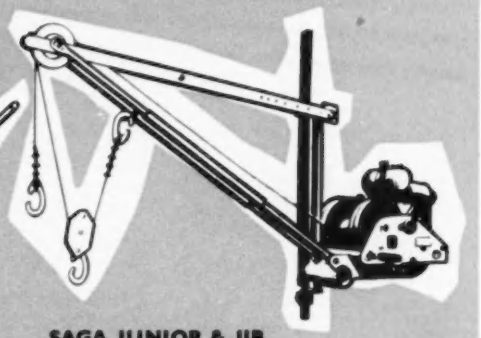

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Mks. I, II and III, conservatively rated up to 60 cwt.

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Lifting 5 cwt. to heights up to 200 feet

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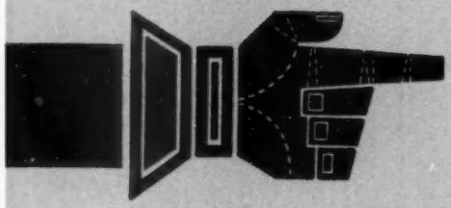

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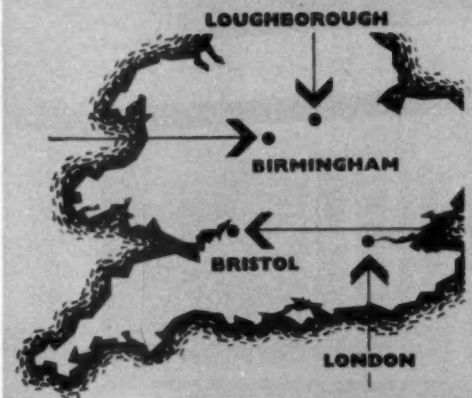

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Telephone: 3781

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Dorset Garage, Downend Road, Bristol
Telephone, Bristol 67-1763

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WITLOR LTD.
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Witlor are geared for speed, service and efficiency in an industry where these factors are vital. A wide range of the best plant and equipment—including the BHC range—is stocked in well-placed depots for immediate delivery. Spares are held, service facilities are comprehensive and *fast*. For plant purchase, after-sales service, long or short term hire, Witlor are specialists offering extra advantages for every plant operator

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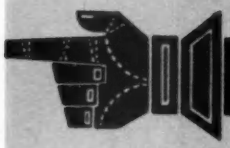

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Outside, standing up to weather and hard usage,
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Rax Roller Leaf Shutter Doors are unequalled for speed,
ease of operation, and years of trouble-free service.
For any opening up to 30′ 0″ high and 200′ 0″ wide.
Hand or Power operated. In steel or aluminium.

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The only fully suspended shutter doors

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MIDDLESBROUGH
COUNTY BOROUGH.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

The following staff required for variety of interesting work in the County Borough which is at the centre of one of the most rapidly developing areas in the country :—
SENIOR ASSISTANT ENGINEERS
SENIOR ASSISTANT ARCHITECTS
SENIOR TOWN PLANNING ASSISTANT
SENIOR ASSISTANT BUILDING SURVEYOR

All posts are on A.P.T. Grade V (£1,310 to £1,480), starting salaries determined according to qualifications and experience. N.J.C. Conditions and Superannuation Scheme.

Housing accommodation will be considered and removal expenses paid.

Application forms from Borough Engineer and Surveyor, Municipal Buildings, Middlesbrough, returnable, together with copies of two recent testimonials, by 11th SEPTEMBER.

WEST RIDING OF YORKSHIRE
COUNTY COUNCIL.

OFFICE OF THE COUNTY ARCHITECT.

Applications are invited for the appointment of BUILDING SURVEYOR at the Wakefield Divisional Office.

Salary grade A.P.T. III, £960-£1,140 per annum.

Applicants should possess a sound knowledge of building construction and be capable of dealing with maintenance works and adaptations to buildings of various types.

Five-day week operated.

The commencing salary will be fixed at a point within the scale commensurate with qualifications and experience.

Applications to be submitted by the FIRST POST on TUESDAY, 29th AUGUST, 1961, on forms to be obtained from and returned to the undersigned.

A. W. GLOVER, F.R.I.B.A.,
County Architect.

Bishopgarth,
Westfield-road,
Wakefield.

AIR MINISTRY

ENGINEERING DESIGNER DRAUGHTSMEN REQUIRED BY AIR MINISTRY IN LONDON

SALARY (inner London scale): Grade II £1,048 to £1,215; Grade III £658 to £1,048 (£866 at age 25)—starting salary depends on age, qualifications and experience.

Civil engineering designer draughtsmen for work on one or more of (a) foul drainage and sewage disposal; (b) water supply and distribution; (c) roads, pavements, earthworks and stormwater drainage (Grades II and III).

Candidates should have served recognised apprenticeship or had equivalent training and also practical experience. Possession of recognised technical qualification an advantage—financial assistance and time off may be allowed for recognised courses of study for technical qualifications. Five-day week with 18 days' paid leave p.a. initially. Promotion and pension prospects. Some overseas tours with special allowances in addition to salary.

Applicants, who must be natural born British subjects, should write to Air Ministry, W.G.d.(CA), Lacon House, Theobalds-road, London, W.C.1, giving age, details of training, qualifications, full particulars of former posts held, or apply to any Employment Exchange quoting Kings Cross O/N 807. Candidates selected will normally be interviewed in London and certain expenses reimbursed. Only candidates selected for interview will be notified.

MIDDLESBROUGH
COUNTY BOROUGH.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Chief Town Planning Officer Scale C (£1,560-£1,825).

The County Borough is in the centre of one of the most rapidly developing areas in the country. The Department has an urgent programme including the Review of the Development Plan and particularly the redevelopment of the Central Area including Comprehensive Development Area procedure, with a view to the implementation of practical schemes in the near future. In addition to development control, the section deals with the preparation of comprehensive layouts for neighbourhood units and Council development of the layout of areas for industrial development.

The post carries Section Head status and requires leadership, experience and drive, particularly the ability to stimulate imaginative and creative ideas. The person appointed must be A.M.T.P.I. and, in addition, should have another professional qualification in Engineering, Architecture or Surveying, with comprehensive experience in Town Planning including organisation of staff, committee work, inquiries, appeals and related duties.

N.J.C. Conditions and Superannuation. Starting salary within the grade will be determined according to qualifications and experience.

Housing accommodation considered.

Forms of application from Borough Engineer and Surveyor, Municipal Buildings, returnable together with names of three referees, by 15th SEPTEMBER.

LONDON TRANSPORT

has vacancy for QUANTITY SURVEYING ASSISTANT CLASS 1 in Office of Civil Engineer (Maintenance), 55 Broadway.

Applicants should have a sound knowledge of building construction, experience in preparation of estimates, specifications and bills of quantities and the ability to prepare drawings to illustrate work contained in the specifications.

Salary range, £1,060-£1,140 per annum.

Valuable free travel; five-day week; contributory superannuation.

Applications to Staff and Welfare Officer, 55 Broadway, S.W.1, quoting reference No. 152/2.

EAST HAM
COUNTY BOROUGH.

SENIOR ASSISTANT ARCHITECT. A.P.T. IV, £1,185-£1,355.

Salary in excess of the minimum may be paid according to qualifications and experience. A subsistence allowance may be granted over a reasonable period to the person appointed if unable to obtain suitable housing accommodation, necessitating the maintenance of two homes.

Further details and application forms, returnable by 1st SEPTEMBER, 1961, from the Town Clerk, Town Hall, E.6.

ISLINGTON
METROPOLITAN BOROUGH.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited from persons not more than 50 years of age for the following appointments :—

ENGINEERING STAFF (Permanent).

2 SURVEYING/TECHNICAL ASSISTANTS. A.P.T. III (£960-£1,140 p.a.) plus London Weighting.

Applicants should have the Intermediate examination of the Municipal Engineers or Chartered Surveyors or other appropriate qualifications, and preference will be given to applicants with a sound knowledge of the Town and Country Planning Acts and London Building Acts.

Application forms, returnable by FIRST POST on MONDAY, 11th SEPTEMBER, 1961, obtainable from the Borough Engineer and Surveyor, Town Hall, Upper-street, N.1.

H. DIXON CLARK,
Town Clerk.

MANCHESTER
CITY HOUSING COMMITTEE.

Applications are invited for the appointment of CLERKS OF WORKS, A.P.T. II, £815-£960 per annum.

Candidates must be thoroughly experienced in all aspects of the building trade with particular emphasis on reinforced concrete work as applied to the erection of multi-storey structures.

Applications, giving full details of age, qualifications and experience, to be received by the Director of Housing, Town Hall, Manchester, 2, by the 26th AUGUST, 1961.

WALTHAMSTOW
BOROUGH.

BOROUGH ARCHITECT'S DEPARTMENT.

Walthamstow is a municipal borough within the County of Essex, population 108,788, rateable value £1,788,707. It is a progressive authority and there is a large programme of interesting architectural and redevelopment schemes to be undertaken.

Applications are invited for the undermentioned vacancy on the permanent staff of the Borough Architect :—

ONE SENIOR ASSISTANT ARCHITECT, Grade A.P.T. IV (£1,185-£1,355 inclusive of London Weighting).

Applicants for the post must be professionally qualified and have had extensive experience.

Housing accommodation will be made available if required, or alternatively the Council will make a 100 per cent. advance for house purchase within the Borough or in adjoining Boroughs.

Applications forms, obtainable from the Borough Architect (F. G. Southgate, A.R.I.B.A., A.M.T.P.I., M.I.Mun.E.), Town Hall, Walthamstow, London, E.17, must be returned to the undersigned by NOON on FRIDAY, 1st SEPTEMBER, 1961

G. A. BLAKELEY,
Town Clerk.

Town Hall,
Walthamstow, E.17.
4th August, 1961.

CIVIL SERVICE COMMISSION.

QUANTITY SURVEYING ASSISTANTS. 55 pensionable posts in Air Ministry, War Office and Ministry of Works for men and women at least 21 on 1st September, 1961. Qualifications: (a) City and Guilds Final Certificate (Sections A and B) in Builders' Quantities, *or* (b) O.N.C. in Building, *or* (c) Licentiate Diploma of the Institute of Builders, *or* (d) evidence of equivalent standard of technical education. At least five years' appropriate training and experience essential. National starting salary £697 at 21 to £884 at 28 or over. Scale maximum £988. Promotion prospects. Write Civil Service Commission, 17 North Audley-street, London, W.1, for application form, quoting **881/61**. Closing date 2nd OCTOBER, 1961.

SOUTHWARK
BOROUGH COUNCIL.

Applications are invited for appointment as ASSISTANT BUILDING MAINTENANCE SURVEYOR. Salary £855 to £1,000 (less £15 if under 26 years of age).

The person appointed will be required to undertake the surveying of buildings and preparations of reports, estimates and specifications in connection with repairs and maintenance of Council Estates and public buildings.

Permanent Council's Conditions of Service of Officers and Superannuation Scheme apply. Medical examination. One Saturday in four. Staff Canteen. No housing. Canvassing disqualifies. Form and further particulars from the undersigned. Closing date 1st SEPTEMBER, 1961.

E. J. PITT,
Town Clerk.

Southwark Town Hall
(Near Elephant and Castle
Underground Station),
Walworth-road, S.E.17.

ISLINGTON
METROPOLITAN BOROUGH.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited from persons not more than 50 years of age for the following appointments :—

ARCHITECTURAL STAFF (Permanent).

(a) 2 SENIOR ARCHITECTURAL ASSISTANTS. A.P.T. V (£1,310-£1,480 p.a.).

(b) 3 ARCHITECTURAL ASSISTANTS. A.P.T. III (£960-£1,140 p.a.).

All plus London Weighting.

Applicants for :—

(a) should be Associate Members of the R.I.B.A. with wide experience including multi-storey housing;

(b) should have passed the Intermediate examination of the R.I.B.A. and be suitably experienced.

Application forms, returnable by FIRST POST on MONDAY, 11th SEPTEMBER, 1961, obtainable from the Borough Engineer and Surveyor, Town Hall, Upper-street, N.1.

H. DIXON CLARK,
Town Clerk.

SOUTHWARK
METROPOLITAN BOROUGH.

Applications are invited for the following appointments on the establishment of the Architect's Section of the Borough Engineer and Surveyor's Department :—

ASSISTANT ARCHITECT: Salary according to A.P.T. IV (£1,185 to £1,355), or A.P.T. V (commencing £1,355 rising to £1,525) depending upon experience.

Candidates must be Associates of Royal Institute of British Architects with considerable experience and capable of leading a design team engaged upon a large and varied programme of schemes for housing development and public buildings.

TECHNICAL ASSISTANT (ARCHITECTURAL): A.P.T. I (£685 to £855) or A.P.T. II (£855 to £1,000), depending upon experience. (£15 per annum less if under 26 years of age.)

Vacancy in architectural design group dealing with new housing and other schemes. Applicants should be experienced detailers and draughtsmen with considerable experience in an architect's office.

Council's Conditions of Service of Officers and Superannuation Scheme apply. Medical examination. No housing. Canvassing will disqualify. Further particulars from the undersigned. Closing date FIRST POST on 1st SEPTEMBER, 1961.

E. J. PITT,
Town Clerk.

Southwark Town Hall
(Near Elephant and Castle
Underground Station),
Walworth-road, S.E.17.

EDINBURGH
CORPORATION.

DEPARTMENT OF THE CITY ARCHITECT.

ASSISTANT ARCHITECTS qualified by examination. Salary Professional Assistants Scale, £850-£1,435 per annum, with placing according to experience.

ARCHITECTURAL ASSISTANTS, unqualified, with some experience. Salary Scale Executive Division Grades I-IV, £640-£925, with placing for suitable applicants.

Applications, giving age, full details of qualifications and experience and the names of two referees as to character, to the City Architect, City Chambers, Edinburgh, 1, by 9th SEPTEMBER, 1961, marked "Staff—Confidential."

TYRONE
COUNTY EDUCATION COMMITTEE.

CHIEF AND ASSISTANT ARCHITECTS.

Applications are invited by Tyrone County Education Committee for the post of CHIEF ARCHITECT in the Education Offices, Omagh, on the salary scale, £1,394 to £1,716 p.a., and for two posts of ASSISTANT ARCHITECT on the salary scale £936 to £1,430 p.a. The points of entry to the salary scales will depend on age, qualifications and experience, and assistance with the payment of removal expenses may be given.

Further particulars and application forms may be obtained from the Chief Education Officer, Education Offices, Omagh, and applications should be lodged with him by MONDAY, 4th SEPTEMBER, 1961.

METROPOLITAN POLICE ARCHITECT AND SURVEYOR'S DEPARTMENT
requires

CLERK OF WORKS
(Technical Officers Grade II)

for work in connection with the erection of Police Stations, Single Men's Hostels, Police Housing and Magistrates' Courts within the Metropolitan Police District.

Qualifications: O.N.C. (Buildings), or equivalent. Ability to drive a car an advantage.

Salary: £1,043 per annum rising by annual increments to £1,188 per annum.

Five-day week (42 hours net). Eighteen days paid holiday a year. Generous sick leave.

J. INNES ELLIOTT,
B. ARCH., F.R.I.B.A.,
Chief Architect and Surveyor.

Apply, giving details of training and experience, to:
Chief Clerk, Architect and Surveyor's Department, Office of the Receiver for the Metropolitan Police District, Tintagel House, Albert Embankment, London, S.E.1.

London County Council
ARCHITECT'S DEPARTMENT

Clerks of Works required in multi-storey housing schemes, new schools and adaptations and improvements to existing buildings.

Up to £950 according to qualifications and experience with scope for advancement to senior posts (maximum £1,070) for men of ability, job allowances up to £165 also paid for the larger and more complex jobs.

Assistant Clerks of Works also required for housing and schools. Up to £845 with opportunities for early advancement to higher class.

Applicants should possess a sound knowledge of building construction, have served a full trade apprenticeship and had experience in a supervisory capacity. Experience in reinforced concrete work an advantage.

Form, returnable by 31st August, from Architect to the Council (EK/B/2253/8A), County Hall, S.E.1.

METROPOLITAN POLICE ARCHITECT AND SURVEYOR'S DEPARTMENT

Applications are invited for the following positions in connection with the design and erection of Police Stations, Single Men's Hostels, Police Housing and Magistrates' Courts and schemes for major alterations to various Police buildings within the Metropolitan Police District.

ASSISTANT ARCHITECTS

Salary: £991 per annum at age 25, rising by annual increments to £1,490 per annum.
(Maximum salary on entry £1,318 per annum at age 34 or over).

Qualifications: Must be registered Architects.

LEADING
ARCHITECTURAL ASSISTANTS

Salary: £1,048 per annum rising by annual increments to £1,220 per annum.

Qualifications: Inter R.I.B.A., H.N.C. or equivalent.

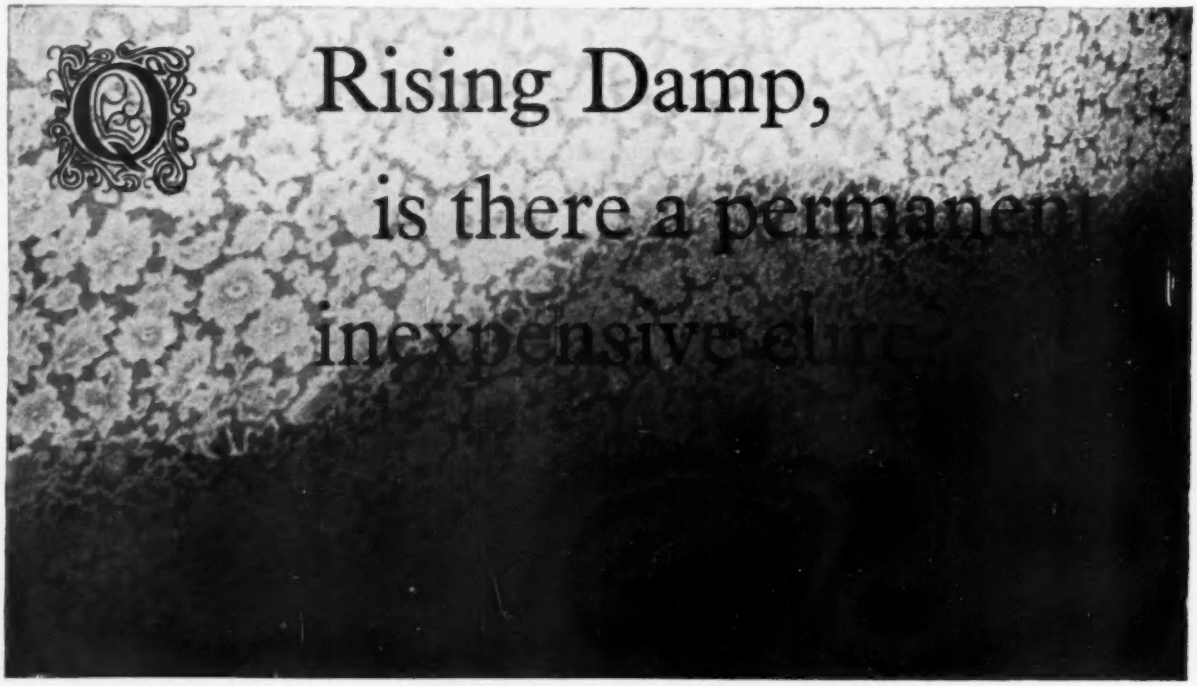
ARCHITECTURAL ASSISTANTS

Salary: £658 per annum at age 21 rising by annual increments to £1,048 per annum
(Maximum salary on entry £960 per annum at age 28 or over).

Qualifications: O.N.C., Inter R.I.B.A. or equivalent.

J. INNES ELLIOTT,
B. ARCH., F.R.I.B.A.,
Chief Architect and Surveyor.

Applications, giving details of training and experience, to:
Chief Clerk, Architect and Surveyor's Department, Office of the Receiver for the Metropolitan Police District, Tintagel House, Albert Embankment, London, S.E.1.



A Yes, R.I.W. 232 DAMP RESISTING COMPOSITION & PLASTERBOND

will permanently solve the problem of rising damp in walls avoiding the difficulty and expense of endeavouring to insert a new damp-proof course.

A scientifically formulated natural bitumen composition, it is applied cold by brush and provides a permanent, waterproof and vapour-proof barrier with a perfect bond for any of the well-known brands of gypsum-plasters, including pre-mixed vermiculite plasters.

No hacking or keying is required, neither is there any departure from normal standard plastering practices.

Painted or distempered surfaces offer no plastering problems as R.I.W. 232 provides a perfect plaster-bond for such surfaces.

R.I.W. 232 is a proved constructional material of over 100 years unsurpassed proved performance and is regularly used by leading Architects, Engineers, Building Contractors and Government Authorities in the design and construction of new buildings.

You can be certain when you employ an R.I.W. product.

The above photograph shows a typical example of rising damp on a wall prior to remedial work being carried out.

The same wall after treatment with R.I.W. 232.

Finally, the wall being plastered, and emphasising the excellent bonding qualities of plaster to R.I.W. 232.

For detailed descriptive literature please write to:—

R.I.W. **R.I.W. PROTECTIVE PRODUCTS COMPANY LIMITED**
325, Whitehorse Road, Croydon, Surrey. Telephone: THOrnton Heath 6121/2/3

SHEFFIELD CITY.

APPOINTMENT OF
(a) ASSISTANT CITY ARCHITECT (Central Area)
(b) ASSISTANT CITY ARCHITECT (Education and General)

Salary: N.J.C. Scale "E," £1,860-£2,120.

An exceptional opportunity occurs for two able and enthusiastic architects to take up these positions and carry the redevelopment of Sheffield a stage further.

In the Central Area Section the major tasks are (a) the design of the new Civic Centre, comprising Town Hall extensions, Law Courts, Police Buildings and Arts Centre; and (b) the redevelopment of the Sheaf Valley.

Applicants for this post should either possess a town planning qualification or have a basic town planning approach to building design.

In the Education and General Section there is a continuing programme of major educational buildings, including Training Colleges, Residential Hostels, District Colleges, Secondary Schools, and interesting work for all other Committees except Housing. The person appointed for this post should have a special interest in modern building techniques, materials and programming and should be keen to accept the challenge for greater building productivity.

Full details of the appointments, together with forms of application, may be obtained from the City Architect, Mr. J. L. Womersley and completed applications must be sent to the undersigned not later than 11th SEPTEMBER, 1961.

JOHN HEYS,
Town Clerk.

Town Hall,
Sheffield 1.

LONDON ELECTRICITY BOARD.

CLERKS OF WORKS (TEMPORARY).

Applications are invited for the ABOVE TEMPORARY POSTS in the Construction Branch of the Chief Engineer's Department at Lesco House, Stamford-street, S.E.1.

Applicants should be building craftsmen having had several years' experience as a general foreman, site agent or clerk of works, and must be capable of supervising the erection of reinforced concrete structures.

The posts are graded under Schedule "A" of the National Joint Board Agreement as Class K (Area), Grade II, £950 to £1,215 per annum, inclusive of London Allowance.

Application forms may be obtained from the Construction Engineer at the above address. Please quote ref. PER/V/3386/B.

AIR MINISTRY
WORKS ORGANISATION

requires QUANTITY SURVEYING ASSISTANTS, Grade III, at R.A.F. and Ministry of Aviation stations throughout the United Kingdom. The work includes abstracting and billing, site measurement and preparation of estimates.

Salary, which is dependent upon age, qualifications and experience, ranges from £749 (age 23) to £988 National Rate (max.) in Grade III. There are pension prospects and also opportunities of advancement to numerous posts in the higher grades viz.:—

Technical Grade II, £988-£1,128, 123 posts.

Technical Grade I, £1,128-£1,388, 42 posts.

Technical Grade B, £1,388-£1,602, 8 posts.

Technical Grade A, £1,482-£1,747, 5 posts.

Vacancies occurring in these higher grades are, as a rule, filled by promotion of existing staff.

Overseas tours for which special allowances, ranging at present up to £1,800 p.a., are payable in addition to a higher salary. Financial assistance and time off allowed for recognised courses of study leading to higher qualifications. Five-day week with 18 days' paid leave a year initially.

Applicants, who must be natural born British subjects, must hold O.N.C. (Building or Builders' Quantities) or equivalent, and have had good experience under Quantity Surveyor or Building Contractor. Knowledge of W.D. Schedule an advantage. Forms from Manager (P.E.2), Ministry of Labour, Professional and Executive Register, Atlantic House, Farringdon-street, London, E.C.4. Candidates selected will be interviewed in Air Ministry, London, and certain expenses reimbursed. Only applicants selected for interview will be advised.

MINISTRY OF EDUCATION

requires for its London headquarters TERRITORIAL ARCHITECTS with experience in design of school buildings, and preferably age 35 or over. Duties include design consultation with Education Authorities, advisory work within Ministry and collaboraton with Development Group. Starting salary normally at minimum of scale £1,516-£2,015. Posts unestablished but possibility of permanent, pensionable appointments later. Five-day week of 42 hours; annual leave rising from 25 to 30 working days. Further details of the posts and application forms from Ministry of Labour, Technical and Scientific Register (K), 26 King-street, London, S.W.1. Please quote J.116/1A.

SHEFFIELD CITY.

PUBLIC WORKS DEPARTMENT.

Applications are invited for the following appointments in the Public Works Department (Henry Smith, A.R.I.C.S., General Manager).

All the posts are permanent appointments, initially on a £3½ million scheme of high flat development.

1. SITE QUANTITY SURVEYOR.
Grade V, Salary £1,310-£1,480.

Applicants must be fully experienced in site measurement, adjustment of variations, interim and final accounts and have some experience in control of bonus operations.

2. ASSISTANT SITE QUANTITY SURVEYOR.
Grade IV, Salary £1,140-£1,310.

Applicants must have had suitable site experience under the foregoing headings.

3. SENIOR ASSISTANT—WORKS (Two required).
Grade IV-V, Salary £1,140-£1,480.

Applicants must have had wide experience as sub-agents or General Foremen and be accustomed to dealing with large scale reinforced concrete construction.

4. SITE ENGINEER.
Grade IV, Salary £1,140-£1,310.

A young engineer is required with some contracting experience and with an interest in setting out, site organisation and concrete technology.

The starting point within the salary range mentioned will depend upon experience and qualifications.

Applications, stating age, experience, qualifications, present employment, together with the names of two referees to reach the undersigned not later than 4th SEPTEMBER, 1961.

JOHN HEYS,
Town Clerk.

Town Hall,
Sheffield 1.
8th August, 1961.

NORTH WEST
METROPOLITAN REGIONAL HOSPITAL BOARD.

HIGHER CLERICAL OFFICER required for Architect's Department, to deal primarily with accounts work. Previous experience of this type of work, or in a builder's office, would be useful. A knowledge of contract procedure is desirable. Salary scale: £620-£785 plus £20 to £30 London Weighting. Superannuable. 5-day week. Modern offices with staff restaurant.

Apply, stating age and experience with names of two referees, to the Secretary, North West Metropolitan Regional Hospital Board, 40 Eastbourne-terrace, London, W.2, by 1st SEPTEMBER, quoting reference 968.

HEREFORDSHIRE
COUNTY COUNCIL.

APPOINTMENT OF COUNTY ARCHITECT.

Applications are invited for the above appointment (whole-time) on the salary scale £2,700 x £75 (5)—£3,075 (plus travelling and subsistence allowances) from Fellows or Associates of the R.I.B.A.

Further particulars and forms of application (returnable by 8th SEPTEMBER, 1961) may be obtained from the Clerk of the County Council, Shirehall, Hereford.

BRITISH RAILWAYS.

QUANTITY SURVEYOR required, experienced in estimating taking off, preparation of specifications and contract documents, valuations for certificates and settlement of final accounts. Applicants should be A.R.I.C.S. Five-day week, residential and other travel concessions, superannuation scheme. Salary range £1,070-£1,145. Apply, giving age, experience and particulars of education, to Chief Civil Engineer (Ref. S.86/20), Brittish Railways, King's Cross Station, London, N.1.

HORNSEY
BOROUGH.

HOUSING MAINTENANCE OFFICER required for inspection of properties, to assist with costing and organisation of repair work.

Salary A.P.T. I-II according to qualifications and experience, plus London Weighting.

Full details with age, qualifications, experience and names of two referees, to Housing Manager, Town Hall, Crouch End, N.8, by 31st AUGUST, 1961.

Applicants must disclose in writing whether they are related to any Member or Officer of the Council.

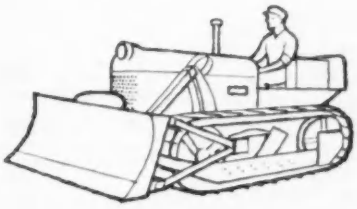
PADDINGTON
BOROUGH COUNCIL.

ASSISTANT BUILDING SURVEYOR, £1,005 to £1,185 p.a.
(Starting salary according to merit.)

Candidates preferably R.I.C.S. (building) should be able to prepare estimates, specifications and supervise conversion and repair work, house and civic properties, surveying, levelling and final accounts experience desirable. Furnish age, qualifications, experience, two referees' names, by 28th AUGUST, quoting A.547.

W. H. BENTLEY,
Town Clerk.

Town Hall,
Paddington, W.2.



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PLANNING AND REBUILDING FOR THE NEW LONDON

There is a unique opportunity to combine public service with the highest possible professional standards for architects, architect/planners, structural engineers, building, quantity and planning surveyors, in the Architect's Department of the London County Council.

District Surveyors' Service—Structural engineers and building surveyors needed.

Modernisation, Adaptation, Rehabilitation—Architects and building surveyors needed.

New Building Programme—Architects and assistants needed to work on housing, schools, South Bank Development, hostels, old people's homes and architectural works associated with road improvements.

Planning of London—Architect/Planners and planning surveyors needed. Development Plan, Development Control and Civic Design, including redevelopment arising from new Roads programme.

Structural Engineering Division—Structural engineers needed for design.

Quantities Division—Quantity surveyors, surveyors for cost planning and workers-up needed.

Voluntary Schools Section—Architectural assistants and building surveyors needed for work on church schools including the initiation of schemes, improvements and maintenance.

Building Regulation Division—Architects and building surveyors needed to examine applications to build, to deal with factory fire arrangements and to help with a campaign to eliminate the danger spots in London where fire risk is high.

Have you thought of joining the L.C.C.?

Whatever changes may result from the Royal Commission Report an enormous programme of work will have to be done and service with the L.C.C. now provides the best training ground for opportunities in the future.

■ Promotion strictly on merit ■ Flexible salary reviews within grades ■ Permanency after probationary service ■ Recognition grants for outstanding work ■ Starting salaries up to £1,500 according to quality and experience.

Please apply for application forms and further particulars to Hubert Bennett, F.R.I.B.A., Architect to the Council, County Hall, S.E.1, quoting reference EK/2196/8.

EAST RIDING OF YORKSHIRE
COUNTY COUNCIL.

Applications are invited for the appointment of a CHIEF QUANTITY SURVEYOR on the staff of the County Architect. The salary will be in accordance with Scale "A" (£1,340-£1,565).

Applicants must be members of the Royal Institution of Chartered Surveyors and have had wide experience in the preparation of estimates, bills of quantities, cost analysis, adjustment of final accounts and other work incidental to such an appointment, including the control of staff.

Applications, giving particulars of age, past and present appointments with salaries, details of experience, together with the names of three referees, should be sent to the County Architect, County Hall, Beverley, not later than THURSDAY, 31st AUGUST, 1961.

THOMAS STEPHENSON,
Clerk of the County Council.

STOURBRIDGE
BOROUGH.

SENIOR ASSISTANT ARCHITECT
GRADE A.P.T. III-IV (£960-£1,310).

Applications are invited for the above appointment in the department of the Borough Engineer and Surveyor. Starting salary will be within the range £960-£1,310, depending on the successful applicant's qualifications and experience.

Applicants should be A.R.I.B.A.

The successful applicant will be required to take charge of the architectural work of the department. Work in hand at present includes flats, shops, maisonettes, bungalows and flatlets. The Council also have under consideration the construction of a multi-storey car park and various redevelopment schemes in the town centre and elsewhere. Therefore experience in this type of work would be an advantage.

Housing accommodation available if appropriate.

Applications stating age, qualifications and experience, with the names of two persons to whom reference may be made, to be sent to H. W. Morris, B.Sc.(Eng.), M.I.Mun.E., A.M.I.C.E., Borough Engineer and Surveyor, Council House, Stourbridge, not later than 28th AUGUST, 1961.

A. P. DRURY,
Town Clerk.

Council House,
Stourbridge.
31st July, 1961.

EALING
BOROUGH.

TOWN PLANNING ASSISTANT, A.P.T. IV (£1,185-£1,355 inclusive) with recognised town planning qualification. Experience necessary.

Full particulars and application form from:

Borough Surveyor, Town Hall, Ealing, W.5.

Closing date: 21st AUGUST, 1961.

E. J. COPE BROWN,
Town Clerk.

LANCASHIRE
COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments on the permanent staff. The Quantity Surveying Division of the Department undertakes work in all stages, from Cost Planning to Final Accounts, and the programme is both interesting and varied.

(a) SENIOR ASSISTANT QUANTITY SURVEYOR, A.P.T. IV (£1,140-£1,310).

Applicants should be Chartered Quantity Surveyors and the person appointed will be a senior member of a team of Surveyors.

(b) QUANTITY SURVEYING ASSISTANT, A.P.T. II (£815-£960).

Applicants should have passed the Intermediate Examination of the R.I.C.S.

(c) QUANTITY SURVEYING ASSISTANT, A.P.T. I (£645-£815).

Applicants should have passed the First Examination of the R.I.C.S.

Application Forms are obtainable from the County Architect, P.O. Box 26, County Hall, Preston, and should be returned by the 18th SEPTEMBER, 1961.

CARDIFF CITY.

CITY ARCHITECT'S DEPARTMENT.
CHIEF ASSISTANT ARCHITECT (CIVIC DESIGN)
N.J.C. Scale "A" (£1,485-£1,565).

Applications for this appointment are invited from qualified and experienced Architects to work under the Assistant City Architect (Civic Design), principally on the redevelopment of outworn shopping, business and housing areas. Experience in similar work and membership of the Town Planning Institute would be considered an advantage.

General Conditions of Appointment may be obtained from the undersigned.

Applications stating age, qualifications, past and present appointments, details of experience and the names of two persons to whom reference can be made, should be delivered to me in appropriately endorsed envelopes and must be received not later than the 11th SEPTEMBER, 1961.

S. TAPPER-JONES,
Town Clerk.

City Hall,
Cardiff.
August, 1961.

WILLESDEN
BOROUGH.

BOROUGH ENGINEER & SURVEYOR'S DEPARTMENT

Applications are invited for the following appointments in the Building Surveyor's Sections:—

(a) GENERAL ASSISTANTS (2 posts) within Grade A.P.T. II (£815-£960 p.a.).

(b) GENERAL ASSISTANT within Grade A.P.T. I (£645-£815 p.a.).

London Weighting is payable in addition to both above salaries. There is no age limit, but applicants should have had experience in the general work of a Building Surveyor's Office and the administration of Building Bye-Laws and the Town Planning Acts. For one of the (a) posts experience of dealing with the control of advertisements will be an advantage.

The Council are prepared to assist by making a mortgage advance for house purchase and making a contribution up to £25 towards the cost of removal expenses.

Full details and forms of application may be obtained from the Borough Engineer, Town Hall, Dyne-road, Kilburn, N.W.6, and must be returned to the undersigned not later than 10 a.m. on MONDAY, 4th SEPTEMBER, 1961.

(Signed) R. S. FORSTER,
Town Clerk.

ROCHESTER CITY.

CITY SURVEYOR'S DEPARTMENT.
HOUSING MAINTENANCE INSPECTOR.

Applications are invited from suitably qualified persons for the above appointment at a salary within Misc. Grade V (£685 to £760).

Candidates should have a good experience of the Building Trade and Housing Maintenance in particular. The commencing salary will be according to qualifications and experience. The post is permanent, superannuable, and is subject to the National Joint Council Conditions.

Housing accommodation will be available if required and removal expenses paid after one year's service.

Applications, giving full particulars of age, present position, experience, and the names of two referees, to be forwarded to James A. Peel, Esq., A.M.I.C.E., M.I.Mun.E., City Surveyor, 66 Maidstone-road, Rochester, not later than MONDAY, 4th SEPTEMBER, 1961.

PHILIP H. BARTLETT,
Town Clerk.

Guildhall,
Rochester.
August, 1961.

WEST HAM
COUNTY BOROUGH.

GROUP ARCHITECT: J.N.C. GRADE "B" £1,485-£1,670 and Car Allowance.

This vacant post calls for a man of experience, drive and initiative, to assist in an expanded programme now being undertaken by the Borough Architect and Planning Officer.

Applications, with details of qualifications and experience (together with names of two referees) to be addressed to Thomas E. North, O.B.E., F.R.I.B.A., Dist.T.P., M.T.P.I., 70 West Ham-lane, Stratford, E.15.

WILLESDEN
BOROUGH.

BOROUGH ENGINEER & SURVEYOR'S DEPARTMENT
APPOINTMENT OF TOWN PLANNING ASSISTANT—GRADE A.P.T. V.

Applications are invited for the appointment of TOWN PLANNING ASSISTANT. Salary A.P.T. V (£1,310-£1,480 per annum, plus London Weighting).

Candidates must possess appropriate qualifications and have had good experience in dealing with planning applications and the general town planning administration.

The Council are prepared to assist by making a mortgage advance for house purchase and making a contribution up to £25 towards the cost of removal expenses.

Full details and forms of application may be obtained from the Borough Engineer, Town Hall, Dyne-road, Kilburn, N.W.6, and must be returned to the undersigned not later than 10 a.m. on MONDAY, 4th SEPTEMBER, 1961.

(Signed) R. S. FORSTER,
Town Clerk.

BIRKENHEAD
COUNTY BOROUGH.

ASSISTANT HEATING AND MAINTENANCE ENGINEER.

Applications invited for ABOVE APPOINTMENT, salary A.P.T. IV, £1,140-£1,310 per annum.

Applicants should have served a recognised apprenticeship in Heating and Ventilating Engineering, be fully experienced in the operation and maintenance of central heating systems including oil burning equipment, supervision of new work and repairs, and in the preparation of reports, specifications, estimates and drawings.

Car allowance and, if required, temporary housing accommodation.

Application forms from the Superintendent and Engineer, Baths & Municipal Buildings, Byrne-avenue Baths, Rock Ferry, Birkenhead.

DONALD P. HEATH,
Town Clerk.

Town Hall,
Birkenhead.
August, 1961.

PORTSMOUTH CITY.

HOUSING DEPARTMENT.
SENIOR MAINTENANCE ASSISTANT required. Grade A.P.T. II. £815-£960. Applicants should have experience in the preparation of specifications, estimates and the supervision of contracts for the modernisation and improvement of prewar Council houses and flats. Housing accommodation in suitable cases will be considered.

Applications, giving full details and the names of two referees, to the Director of Housing, 1 Clarence-parade, Southsea, by 23rd AUGUST.

WESTON-SUPER-MARE
BOROUGH.

Applications are invited for the position of ARCHITECTURAL ASSISTANT. Salary Grade A.P.T. III (£960-£1,140). J.N.C. conditions, superannuated. Housing accommodation provided if necessary. Removal expenses repaid over a period of two years.

Applications stating age, education, qualifications, appointments held (with dates and salaries) and two referees to Borough Engineer, Town Hall, Weston-super-Mare, not later than 28th AUGUST, 1961.

ASSISTANT QUANTITY SURVEYORS

required by

MINISTRY OF EDUCATION
ADMIRALTY
WAR OFFICE
AIR MINISTRY
MINISTRY OF WORKS

Posts in London, Provinces and Overseas. London Salaries for suitably qualified and experienced men up to £1,412 p.a. Prospects of promotion and pensionable status. Write for particulars of vacancies in each Department and forms, quoting J.Q.S., to Ministry of Labour, Technical and Scientific Register (Room 403), 28, King Street, London, S.W.1.

SCOTTISH SPECIAL HOUSING ASSOCIATION LTD.

ARCHITECTURAL DIVISION

APPOINTMENT OF ARCHITECT

Applications are invited from qualified Architects for the following appointment on the permanent staff:—

Architect Grade II—Salary Scale £895—£1,385

The post is superannuable under the Local Government Superannuation Acts, and placing will be related to experience.

The Association is a Government sponsored and financed body, providing houses and flats throughout Scotland as directed by the Secretary of State.

The Association has at present a large and interesting programme comprising a number of major housing projects, including central redevelopment in Glasgow and other towns, together with an important programme of work in connection with Glasgow's "Overspill". Designs for mixed development layouts, including multi-storey blocks of flats up to 26-storeys in height, are being prepared, and cost analysis techniques are being used in the preparation of drawings. The post advertised offers considerable valuable experience and opportunities for persons interested in civic design, landscaping and three-dimensional planning of urban developments.

The Headquarters of the Association are in Edinburgh where housing accommodation could be provided if required.

Application Forms with full details of the appointment from

Harold E. Buteux, A.R.I.B.A., A.M.T.P.I., A.R.I.A.S.
Chief Technical Officer,
Scottish Special Housing Association Ltd.,
15/21 Palmerston Place,
Edinburgh, 12.

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On this basis Tricosal, which waterproofs a square yard of 3/1 sand and cement renderings ¾ in. thick for only 3¼*d.*, is the most economical as well as the most efficient additive. It waterproofs integrally and, being a liquid, mixes with the gauging fluid and is evenly distributed throughout the mix.

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For 30 years or more Tricosal has been specified by leading Architects not only for waterproofing but for hardening cement and concrete and increasing their resistance to oils and acids. Send for Information Leaflet No. 1.

* Osal is the generic name for the products of A. A. BYRD & CO. LTD. Florosal, Neocosal, Tricosal and Lubrosal. Literature about each individual product is available on request.

A. A. BYRD & CO. LTD. (DEPT. B9) 210 TERMINAL HOUSE, GROSVENOR GARDENS, LONDON, S.W.1

Phone: SLOane 5236 Grams: Byrdicom, Wesphone, London Works: Basingstoke, Hants.

LINDSEY (LINCOLNSHIRE) COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT.

North Lincolnshire is developing rapidly and the work in the Department is growing correspondingly and is of a most interesting nature. Lincoln and District offer pleasant living conditions, reasonable priced houses, good schools, proximity to the coast, and open country with few traffic problems.

Vacancies exist on the following grades.

(A) A.P.T. III, Salary £960-£1,140. ARCHITECTURAL ASSISTANT. Experienced man required as middle member of a team.

(B) A.P.T. I. £645-£815. JUNIOR studying for R.I.B.A. qualification.

(C) General Grade at 21 years of age. £420-£520. DRAUGHTSMAN with knowledge of building construction.

(D) A.P.T. II. £815-£960. ASSISTANT QUANTITY SURVEYOR able to abstract and take off for small works.

(E) A.P.T. II. £815-£960. BUILDING INSPECTOR, good practical knowledge and draughtsmanship for minor schemes of alterations and maintenance.

Commencing salary within the grade dependent upon qualifications and experience. Five-day week. Post Entry Training Assistance for study. N.J.C. Conditions of service. Canvassing will disqualify and candidates must disclose in writing whether to their knowledge they are related to any Member or Senior Officer of the Council.

Applications, stating post applied for, giving age, qualifications, experience, present post and salary and names of two referees, to be sent to A. Ronald Clark, A.R.I.B.A., A.M.T.P.I., County Architect, County Offices, Lincoln, not later than 2nd SEPTEMBER, 1961.

STAFFORDSHIRE COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.
APPOINTMENT OF ASSISTANT HEATING ENGINEER.
Grade A.P.T. V (£1,140-£1,310.)

Applications are invited for the above post from Associate Members of the Institution of Heating and Ventilating Engineers. The Offices are modern and well equipped and the Department has a large and varied programme of interesting work.

Five-day week, assistance with removal expenses, etc. The Council has a scheme for loans to employees wishing to purchase their own houses.

Forms of application from P. Woodcock, F.R.I.B.A., County Architect, Green Hall, Lichfield-road, Stafford.

Closing date 30th AUGUST, 1961.

T. H. EVANS,
Clerk of the County Council.

LEICESTER CITY.

CITY SURVEYOR'S DEPARTMENT.

Applications are invited for the following posts in the Building Inspection Section of my Department :—

(1) AREA INSPECTORS, Grade A.P.T. IV (£1,140-£1,310 p.a.).

(2) SENIOR INSPECTORS, Grade A.P.T. II (£815-£960 p.a.).

Applicants should hold the Building Inspectors' Certificate of the institution of Municipal Engineers or other suitable qualification have had wide experience in Municipal Building Inspection duties and Building Law and be capable of controlling staff.

(3) JUNIOR INSPECTORS, Grade A.P.T. I/II (£645-£960 p.a.).

Applicants should hold the Building Inspectors' Certificate of the institution of Municipal Engineers or other suitable qualification.

(4) TRAINEE INSPECTORS, Misc. Div. III/IV (£555-£685 p.a.).

Applicants should have completed a building trades apprenticeship or possess the O.N.C. in Building and have attained the age of 21. Applicants under 21 years of age will be considered and graded within General Division (£220-£455 p.a.) according to age and qualifications.

The Local Government Superannuation Acts and the passing of a medical examination apply to all posts. Housing accommodation will be available to successful applicants if married.

Applications, stating age, qualifications and experience, and the names of two referees, should be forwarded to me by 4th SEPTEMBER, 1961.

JOHN L. BECKETT, M.I.C.E.,
City Surveyor.

Town Hall,
Leicester.

STAFFORDSHIRE COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.
VACANCIES.

ARCHITECTURAL ASSISTANTS, £815-£960.
Inter R.I.B.A. required.

ARCHITECTURAL DRAUGHTSMEN, £555-£625.
Four years' experience in a similar capacity is required.

Good working conditions, five-day week, assistance with removal expenses, generous Post Entry Training Scheme, etc. The Council has a scheme for loans to employees wishing to purchase their own houses.

Forms of application from P. Woodcock, F.R.I.B.A., County Architect, Green Hall, Lichfield-road, Stafford.

Closing date 30th AUGUST, 1961.

T. H. EVANS,
Clerk of the County Council.

GRIMSBY COUNTY BOROUGH.

BOROUGH ENGINEER AND ARCHITECT'S DEPARTMENT.
ASSISTANT ARCHITECT.

Applications are invited for the appointment of an ASSISTANT ARCHITECT on the permanent staff, Grade A.P.T. III, commencing salary £960 rising to £1,140 per annum.

The appointment is subject to the Conditions of Service of the National Joint Council, terminable by one month's notice on either side, and to the provisions of the Local Government Superannuation Acts. The successful candidate will be required to pass a medical examination.

Applications, stating age, qualifications (if applicable), present and past appointments and details of experience, together with the names and addresses of two referees, must be delivered to the undersigned not later than FIRST POST on MONDAY, the 28th AUGUST, 1961.

J. V. OLDFIELD, L.R.I.B.A.,
Borough Engineer and Architect.

Municipal Offices,
Town Hall Square,
Grimsby.
August, 1961.

GRIMSBY COUNTY BOROUGH.

BOROUGH ENGINEER AND ARCHITECT'S DEPARTMENT.
ASSISTANT QUANTITY SURVEYOR.

Applications are invited for the appointment of an ASSISTANT QUANTITY SURVEYOR on the permanent staff, Grade A.P.T. III, commencing salary £960 rising to £1,140 per annum.

The appointment is subject to the Conditions of Service of the National Joint Council, terminable by one month's notice on either side, and to the provisions of the Local Government Superannuation Acts. The successful candidate will be required to pass a medical examination.

Applications, stating age, qualifications (if applicable), present and past appointments and details of experience, together with the names and addresses of two referees, must be delivered to the undersigned not later than FIRST POST on MONDAY, the 28th AUGUST, 1961.

J. V. OLDFIELD, L.R.I.B.A.,
Borough Engineer and Architect.

Municipal Offices,
Town Hall Square,
Grimsby.
August, 1961.

BIRMINGHAM CITY.

CITY ARCHITECT'S DEPARTMENT.

Following the re-organisation of the Quantity Surveyor's Section, applications are invited from fully qualified QUANTITY SURVEYORS for a number of new appointments on the following scales :—

(a) Senior Officers' Scale "C." £1,560 to £1,825.

Candidates for these appointments should be capable of leading teams of professional staff undertaking the complete range of Quantity Surveying duties.

(b) A.P.T. V, £1,310 to £1,480.

(c) A.P.T. IV, £1,140 to £1,310.

Vacancies also exist for applicants who have passed the Intermediate R.I.C.S. (Quantities) examination or hold equivalent qualifications on Grade A.P.T. I (£665 to £835).

Commencing salaries within the scales will be according to capabilities and experience.

Five-day week. Pension scheme. Medical examination.

Applications, stating post applied for, age, qualifications, present position and salary, experience and names of two referees, to reach the undersigned by 1st SEPTEMBER, 1961.

A. G. SHEPPARD FIDLER,
City Architect.

Baskerville House,
Civic Centre,
Birmingham, 1.

HUNTINGDONSHIRE.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments :—

(1) TECHNICAL ASSISTANT (HEATING ENGINEER). Grade A.P.T. III (£960-£1,140) or Grade A.P.T. IV (£1,140-£1,310). Applicants for the Grade A.P.T. IV post must be qualified A.I.H. & V.E.

The person appointed will be a member of the Engineering Section of the Department, and duties will consist of all works connected with heating installations related to both small and large building projects. Applicants must be competent draughtsmen with experience in the design of heating and allied services.

(2) TECHNICAL ASSISTANT (ELECTRICAL ENGINEER). Grade A.P.T. III (£960-£1,140) or Grade A.P.T. IV (£1,140-£1,310). Applicants for the Grade A.P.T. IV post must be Chartered Electrical Engineers (A.M.I.E.E.).

The person appointed will be a member of the Engineering Section, and duties will consist of all works connected with electrical installations related to both small and large building projects.

Application forms may be obtained from S. M. Holloway, A.R.I.B.A., County Architect, County Buildings, Huntingdon, and completed forms should be returned to the undersigned by MONDAY, 28th AUGUST, 1961.

A. C. AYLWARD,
Clerk of the County Council.

County Buildings,
Huntingdon.

HARTLEY WINTNEY RURAL DISTRICT COUNCIL.

APPOINTMENT OF SENIOR BUILDING INSPECTOR.

Applications are invited for the above appointment in the Engineer and Surveyor's Department of the Council.

Applicants should preferably hold the Building Inspector's Certificate of the Institute of Municipal Engineering, and have a sound knowledge of the Building Byelaws and their enforcement. Experience in dealing with Town and Country Planning Applications will be an advantage.

The appointment will be on A.P.T. Grade II and subject to the N.J.C. Conditions of Service. Housing accommodation will be made available to the successful applicant.

Applications, stating age, qualifications and experience, together with the names of two referees, to be delivered to the undersigned not later than MONDAY the 28th AUGUST, 1961.

H. C. K. BROADHURST,
Clerk of the Council.

BERMONDSEY METROPOLITAN BOROUGH.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.
ASSISTANT ARCHITECT.

Applications are invited from persons under 51 years of age on 28th AUGUST, 1961, for the permanent appointment of ASSISTANT ARCHITECT, Grade A.P.T. III-IV (£960-£1,310) plus £45 London Weighting, commencing salary according to experience. Applicants must have passed Final R.I.B.A. examination and should have experience in multi-storey dwellings.

Applications, on forms to be obtained from the undersigned, to be submitted by 28th AUGUST, 1961.

J. S. LAMBERT,
Town Clerk.

Municipal Offices,
Spa-road, S.E.16.

COVENTRY CITY.

DEPARTMENT OF ARCHITECTURE AND PLANNING
(QUANTITY SURVEYING DIVISION).

QUANTITY SURVEYORS, appropriately qualified, A.P.T. IV/V (£1,140-£1,480).

Appointment may be made, according to qualification/experience, within combined grade. Permanent and pensionable subject to satisfactory medical history.

Housing accommodation in approved circumstances or up to 95 per cent. advance for house purchase. Removal expenses loan.

Good general experience desirable and ability to take-off and/or manage and settle large Contracts of all types including "new tradition" multi-storey flats.

Details and application form from City Architect and Planning Officer, Council House, Coventry, returnable by 28th AUGUST, 1961.

BEDFORDSHIRE COUNTY COUNCIL.

COUNTY PLANNING DEPARTMENT.

Applications are invited from suitably qualified persons for the following new posts :—

(a) DEVELOPMENT PLAN OFFICER, A.P.T. IV/V (£1,140-£1,480);

(b) DEVELOPMENT PLAN OFFICER (URBAN RENEWAL), A.P.T. Grade IV/V (£1,140-£1,480);

(c) VALUER / PLANNER (URBAN RENEWAL), A.P.T. Grade IV/V (£1,140-£1,480);

(d) DRAUGHTSMAN / MODEL MAKER, A.P.T. Grade II/III (£815-£1,140);

(e) DEVELOPMENT PLAN ASSISTANT, A.P.T. Grade II (£815-£960).

Application forms and particulars of the posts from Establishment Officer, Shire Hall, Bedford. Closing date 15th SEPTEMBER, 1961.

Quantity Surveying Assistants

required by

ADMIRALTY WAR OFFICE

AIR MINISTRY MINISTRY OF WORKS

Posts in London, Provinces and overseas. Salaries in London for candidates with suitable experience range from £752 p.a. at age 21, to £1,188 p.a. Write for particulars of vacancies in each Department, and forms to **Ministry of Labour, Technical and Scientific Register (Room 403), 28, King Street, London, S.W.1.**

HAMPSHIRE COUNTY COUNCIL

APPOINTMENT OF ARCHITECTS

The County Architect (H. Benson Ansell) is seeking the following additional pensionable staff for the current major building programme:—

Principal Assistant Architect, Scale C (£1560—£1825)

3 Senior Assistant Architects, Scale A/B (£1480—£1670)

3 Assistant Architects, A.P.T. IV/V (£1140—£1480)

Some of these posts will include development work in connection with a newly-formed Consortium (S.C.O.L.A.) for school building which offers scope for men with drive, initiative and design ability, who are interested in research and development work and the application of original thought to design and construction. Candidates for these posts should mark their application forms "SCOLA".

Candidates must be fully qualified and possess experience commensurate with the grade of post for which they are applying. Separation allowance and assistance with removal expenses in approved cases. Five-day week. Canteen facilities.

Application forms, returnable by 5th September from the **Clerk of the County Council, The Castle, Winchester.**

AMENDED ADVERTISEMENT.

ENFIELD
BOROUGH.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.
(Population 110,000—Area 12,400 acres.)

Applications are invited for the following established positions within the Grades shown:—

(a) CHIEF PLANNING ASSISTANT. A.P.T. V (£1,310-£1,480 p.a.).

(b) ARCHITECTURAL ASSISTANTS. A.P.T. III (£960-£1,140 p.a.).

The commencing salary will be fixed at a point within the Scale commensurate with qualifications and experience.

The appropriate London Weighting allowance will be paid in addition to the above salaries.

Applicants for post (a) must have passed the Final examination of the Town Planning Institute and Membership of another related professional body will be considered an advantage. This post also carries an essential car users' allowance.

The Council are prepared to consider the provision of housing accommodation if required, or 100 per cent. advances to successful applicants for house purchase within the Borough, in both (a) and (b).

Five-day week.

Details of appointments and application forms obtainable from Mr. H. D. Peake, M.Sc.(Eng.), Borough Engineer and Surveyor, 7 Little Park Gardens, Enfield, Middx.

CYRIL E. C. R. PLATTEN,
Town Clerk.

Civic Centre,
Enfield.

ROTHERHAM
COUNTY BOROUGH.

BUILDING WORKS DEPARTMENT.

Applications are invited for the position of TECHNICAL ASSISTANT in accordance with Grade A.P.T. I, salary £645-£815 N.J.C.

Conditions: Medical Examination. Superannuable Post.

Candidates should have a sound knowledge of Builders Quantities, and Estimating and be familiar with Bonus Schemes for Maintenance and New Construction.

This is a new position and will be progressive in an expanding Department.

Applications stating age, qualifications and experience, together with the names of two referees should be addressed to the undersigned not later than 1st SEPTEMBER, 1961.

JOHN S. WALL, ESQ.,
Town Clerk.

Municipal Offices,
Rotherham,
Yorkshire.

METROPOLITAN POLICE RECEIVER'S OFFICE
requires
ASSISTANT SURVEYORS

for work in connection with the maintenance and alteration of all types of Police buildings and of Magistrates' Courts within the Metropolitan Police District.

Salary: £991 per annum at age 25, rising by annual increments to £1,490 per annum. (Maximum salary on entry £1,318 per annum at age 34 or over).

Qualifications: Applicants must be Registered Architects or have achieved Corporate membership of R.I.C.S. (Building Surveying Section).

Five-day week (42 hours gross). Twenty-two days paid holiday a year. Generous sick leave.

J. INNES ELLIOTT,
B. ARCH., F.R.I.B.A.,
Chief Architect and Surveyor.

Apply, giving details of training and experience, to:
Chief Clerk, Architect and Surveyor's Department, Office of the Receiver for the Metropolitan Police District, Tintagel House, Albert Embankment, London, S.E.1.

ARCHITECT
(Grade II)

required in construction division of L.C.C. Parks Dept. Salary £1,250—£1,500, starting point according to experience. Opportunity for interesting work in collaboration with landscape architects.

Apply to

Chief Officer, L.C.C. Parks Dept., (AI/B/2292/8), County Hall, London, S.E.1.
(WATerloo 5000 ext. 8076)

AIR MINISTRY

required SENIOR WORKERS UP in Quantities Division in London. Salary, which is dependent on age, qualifications and experience, ranges from £1,043 to £1,188 (max.) on annual incremental basis. Five-day week with three weeks three days' paid leave a year initially. Some promotion and pension prospects. Qualifications: Applicants, who must be natural born British Subjects, should hold O.N.C. or C. and G. (Quantities) or equivalent and be fully competent to work up entire bills of quantities. Financial assistance and time off allowed for recognised courses of study leading to higher qualifications. Forms from Manager (PE 519), Ministry of Labour Professional and Executive Register, Atlantic House, Farringdon-street, London, E.C.4. Candidates selected will normally be interviewed in London and certain expenses reimbursed. Only applicants selected for interview will be advised.

MIDDLESEX
COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

HEATING ENGINEERING ASSISTANTS required. (a) A.P.T. IV (£1,140-£1,310) and (b) A.P.T. I (£645-£815), all plus London Weighting. Established. Prescribed conditions. 5-day week. Staff canteen. Applicants for Post (a) should have experience of preparation of drawings and specifications for schemes for all types of public buildings. Post (b): to assist on preparation of heating schemes or layout of cold water schemes. Application forms from the County Architect, 1 Queen Anne's Gate Buildings, Dartmouth-street, S.W.1, by 28th AUGUST. (Quote H.90B.)

NORTH WEST
METROPOLITAN REGIONAL HOSPITAL BOARD.

HOSPITAL BUILDING PROGRAMME. APPOINTMENTS OF SURVEYING STAFF.

1. ASSISTANT QUANTITY SURVEYOR (Ref. 965). To be experienced in taking off, abstracting and billing of quantities, measurement of work in progress and settlement of final accounts.

2. QUANTITY SURVEYING ASSISTANT (Ref. 966). For working up bills of quantities and final accounts, measuring on site and taking off for small works.

3. BUILDING SURVEYING ASSISTANT (Ref. 967). For assisting in surveys of hospital sites and preparation of working drawings and specifications under supervision for works of a minor character.

Salary Scales: Assistant Quantity Surveyor, £945-£1,360; Surveying Assistants, £645-£940.

Commencing salary above minimum, subject to certain conditions.

Posts are permanent and superannuable. Five-day week. There is a scheme of financial assistance to students preparing for professional examinations.

Apply, stating age, qualifications (with dates) and experience, with names of two referees, to the Secretary, North West Metropolitan Regional Hospital Board, 40 Eastbourne-terrace, W.2, quoting appropriate reference number, by 6th SEPTEMBER, 1961.

LEICESTER CITY.

CITY SURVEYOR'S DEPARTMENT.

Applications are invited for the post of BUILDING SURVEYOR in the Maintenance Section of my Department on Grade A.P.T. V (£1,310-£1,480 p.a.).

Candidates must be suitably qualified as an Architect or Surveyor, and have a good knowledge of and be experienced in the maintenance of public buildings, alterations and additions to properties, preparation of plans, specifications, estimates and schedules, and the control of staff. A knowledge of Works Study will be an advantage.

The appointment is subject to the Local Government Superannuation Acts and the passing of a medical examination.

Housing accommodation will be made available to the successful applicant, if married.

Applications, stating age, qualifications and experience, and the names of two referees, should be forwarded to me by 4th SEPTEMBER, 1961.

JOHN L. BECKETT, M.I.C.E.,
City Surveyor.

Town Hall,
Leicester.

PADDINGTON
BOROUGH COUNCIL

(550) QUANTITY SURVEYOR (£1,185-£1,355)
(551) ASST. QUANTITY SURVEYOR (£1,005-£1,185)
(552) ARCHITECTURAL ASSISTANT (£1,005-£1,185)

Starting salary in each case according to merit.

For post 550, candidates should be suitably qualified with good experience.

For posts 551 and 552, preference will be given to candidates possessing 'intermediate qualifications' and appropriately experienced.

Applications (quoting post number) should state age, particulars of qualifications, details of experience and names of two referees. Last date for receipt 28th AUGUST, 1961.

W. H. BENTLEY,
Town Clerk.

Town Hall,
Paddington, W.2.

WREXHAM
BOROUGH.

(a) TRAINEE BUILDING INSPECTOR.

(b) JUNIOR LABORATORY ASSISTANT.

Applications are invited from youths for the ABOVE APPOINTMENTS in the Borough Engineer and Surveyor's Department.

Applicants should have the General Certificate of Education at "O" Level for the appointments as follows:—

(a) English Language, Mathematics, and two other subjects.

(b) English Language, Mathematics, Chemistry and one other subject.

Opportunity will be given for the successful candidates to follow an approved course of study to qualify in their respective professions.

Forms of application and particulars obtainable from the Borough Engineer and Surveyor, Guildhall, Wrexham, and applications in the envelope provided, to be received not later than FIRST POST MONDAY, 4th SEPTEMBER, 1961.

Guildhall,
Wrexham.
August, 1961.

MALDON
RURAL DISTRICT COUNCIL.

BUILDING INSPECTOR.

Applications are invited for the appointment of BUILDING INSPECTOR at a salary in accordance with A.P.T. Grade II (£815-£960).

Applicants must have a sound knowledge of building construction and be experienced in the examination of plans deposited under Building Byelaws and inspection of work in progress.

The appointment will be subject to the Local Government Superannuation Acts, the National Scheme of Conditions of Service, and to one month's notice on either side.

The Council will assist with housing accommodation and a car allowance will be paid for up to an 8 h.p. car based on the National Scale.

Applications, giving particulars of age, qualifications and experience, with the names of two persons to whom reference may be made, to be forwarded to the undersigned not later than the 29th AUGUST, 1961.

Applicants must disclose any relationship they may have with any member or officer of this Council. Canvassing disqualifies.

L. H. HISCOTT,
Clerk of the Council.

Council Offices,
Wantz-road,
Maldon,
Essex.
10th August, 1961.

ST. MARYLEBONE
METROPOLITAN BOROUGH.

CLERK OF WORKS required Borough Engineer's Dept., Grade A.P.T. II/III (£815-£1,140) plus London Weighting. Permanent superannuable appointment. Commencing salary within scales according to qualifications and experience. Applicants should have served apprenticeship within building trade and hold First Class City & Guilds Certificate or Certificate of Clerk of Works or equivalent qualification. Experience in supervision of building works as General Foreman and/or Clerk of Works is essential.

Write Establishment Officer, Town Hall, St. Marylebone, W.1, for application form, returnable by 6th SEPTEMBER, 1961.

WANSTEAD AND WOODFORD
BOROUGH.

ARCHITECTURAL ASSISTANT
A.P.T. I/II
(£645 to £960 + London weighting).

Applicants should have passed the Inter. exam. of the R.I.B.A. and local government experience an advantage. Starting salary in accordance with experience of the successful applicant.

Forms obtainable from, and to be returned to, L. S. Jeffery, Borough Engineer, Municipal Offices, Woodford, E.18, by 25th AUGUST, 1961.

CASTLEFORD
BOROUGH.

CLERKS OF WORKS (MAINTENANCE)—
BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for this appointment. Salary Grade A.P.T. I (£645-£815).

Candidates should have experience in office administration, the execution and supervision of repairs to houses and public buildings. Experience in mining subsidence repairs and procedure would be an advantage.

N.J.C. service conditions; superannuable; terminable by one month's notice on either side. The successful applicant will be required to pass satisfactorily a medical examination.

Applications on forms obtainable from me to be returned by the 25th AUGUST, 1961.

Canvassing disqualifies.

ERNEST HUTCHINSON,
Town Clerk.

Town Hall,
Castleford.

DEWSBURY
COUNTY BOROUGH.

BOROUGH ARCHITECT AND BUILDINGS SURVEYOR'S DEPARTMENT.

Applications are invited for the following appointments within the scope of the grades stated:—

(a) TOWN PLANNING ASSISTANT (should be A.M.T.P.I.). A.P.T. Grade IV (£1,140-£1,310).

(b) ASSISTANT ARCHITECT (should be A.R.I.B.A.). A.P.T. Grade IV (£1,140-£1,310).

(c) ARCHITECTURAL ASSISTANT. A.P.T. Grade I (£645-£815).

(d) JUNIOR ARCHITECTURAL ASSISTANT/DRAUGHTSMAN. General Division (£260-£630).

The provision of housing accommodation will be considered if required for appointments (a), (b) and (c).

Applications for forms and particulars of appointments to A. G. Beckett, A.R.I.B.A., A.M.T.P.I., Borough Architect and Buildings Surveyor, Town Hall, Dewsbury. Closing date 9th SEPTEMBER, 1961.

A. NORMAN JAMES,
Town Clerk.

Town Hall,
Dewsbury.
14th August, 1961.

WOOLWICH
METROPOLITAN BOROUGH.

QUANTITY SURVEYOR/ESTIMATOR.

Applications are invited for the above permanent appointment in the Borough Engineer's Department. Salary within Grade A.P.T. III (£960-£1,140) plus London Weighting (£45). Contributory Superannuation scheme. Five-day week.

Estimates, bills of quantities and specifications, measurement of works, settlement of interim and final accounts.

Applications, stating age, education and training, qualifications, present and past appointments (with dates and salaries), and giving names of two referees, should reach the Town Clerk, Woolwich, S.E.18, by 4th SEPTEMBER, 1961.

SHEFFIELD CITY.

APPOINTMENT OF SENIOR CLERK OF WORKS (HOUSING).
Grade A.P.T. III (£960-£1,140).

Applications are invited for the above permanent appointment on the staff of the City Architect, Mr. J. L. Womersley, to supervise contracts for the erection of houses, maisonetes and multi-storey flats.

Candidates should have a thorough knowledge of building construction including modern reinforced concrete practice, a wide experience of the building trade and hold the Higher National Certificate in Building or equivalent qualification.

Applications, stating age, present and past appointments, and full particulars of qualifications and experience, accompanied by the names and addresses of two referees, should be sent to the undersigned by THURSDAY, 31st AUGUST, 1961.

JOHN HEYS,
Town Clerk.

Town Hall,
Sheffield, 1.

MIDDLESEX
COUNTY COUNCIL.

EDUCATION COMMITTEE.
TOTTENHAM TECHNICAL COLLEGE, HIGH-ROAD, N.15.

Principal: E. T. S. Hoffman, M.A.

Required as soon as possible an ASSISTANT LECTURER, Grade B, to teach Cabinet Making Classes in the City and Guilds Courses up to Final Grade in practical and ancillary subjects. Applicants should possess a good standard of General Education, and 1st Class Final Certificate of the subject in the City and Guilds Examinations. Preference will be given to candidates who have had experience of teaching in a Technical College and who have attended a recognised Teacher Training Course.

Salary (at present) £738-£1,201 per annum. Additions may be given for industrial experience (up to £330 above the minimum), training and study (up to £120 above the maximum), qualifications (£165 above the maximum).

Application forms and further particulars from the Principal (s.a.e.) to whom applications should be submitted WITHIN 14 DAYS of the appearance of this advertisement.

C. E. GURR, M.Sc., Ph.D.,
Chief Education Officer.

DEWSBURY
COUNTY BOROUGH.

BOROUGH ARCHITECT AND BUILDINGS SURVEYOR'S DEPARTMENT.

Applications are invited for the following appointment within the scope of the grade stated:—

PRINCIPAL ASSISTANT QUANTITY SURVEYOR. A.P.T. Grade V (£1,310-£1,480). (This post ranks as Chief Assistant.)

The provision of housing accommodation will be considered if required.

Applications for forms and particulars of appointment to A. G. Beckett, A.R.I.B.A., A.M.T.P.I., Borough Architect and Buildings Surveyor, Town Hall, Dewsbury. Closing date 9th SEPTEMBER, 1961.

A. NORMAN JAMES,
Town Clerk.

Town Hall,
Dewsbury.
14th August, 1961.

WEST SUFFOLK
COUNTY COUNCIL.

Applications are invited for the following posts:—

(a) ASSISTANT QUANTITY SURVEYOR, A.P.T. II-III (£815-£1,140), commencing salary according to experience. Applicants should have passed the Intermediate Examination of the R.I.C.S. (Quantities Division) or I.Q.S.

(b) BUILDINGS INSPECTOR, A.P.T. II (£815-£960). Applicants should have experience in the preparation of reports and specifications, and supervision of work.

Appointment subject to National Conditions of Service; medical examination; five-day week; schemes for payment of removal expenses and housing separation allowances in operation.

Application forms obtainable from the County Architect, 13, Westgate-street, Bury St. Edmunds, to be returned as soon as possible.

CHESTERFIELD
RURAL DISTRICT COUNCIL.

APPOINTMENT OF BUILDING INSPECTOR.

Applications are invited for the ABOVE APPOINTMENT in the department of the Engineer and Surveyor at a salary on scale A.P.T. I-II (£645-£960).

Applicants should hold the Building Inspector's Certificate of the Royal Institute of British Architects and/or the Institution of Municipal Engineers.

The appointment is subject to the National Scheme of Conditions of Service, Local Government Superannuation Acts and the passing of a medical examination. Housing accommodation will be provided in appropriate cases and removal expenses will be paid. Essential user car allowance on Scale I.

Applications giving details of age, qualifications and experience, together with the names and addresses of two referees should be delivered to the undersigned by 28th AUGUST, 1961.

H. O. HAWKINS,
Clerk of the Council.

Rural Council House,
Saltergate,
Chesterfield.

LAMBETH
METROPOLITAN BOROUGH.

HOUSING DEPARTMENT.

CLERKS OF WORKS (2) required for new building work (housing, library). Salary: £1,000 p.a. Apply in writing, giving full details of experience to the Director of Housing, 7 Town Hall-parade, Brixton, S.W.2.

KEIGHLEY
BOROUGH.

BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of a qualified SENIOR ASSISTANT ARCHITECT, grade A.P.T. IV (salary range £1,140-£1,310), who will be responsible for a small section of the office. Applicants must have had experience on education work and the supervision of contracts.

Applications to be made upon the prescribed form to be obtained from the Borough Architect, College-street, Keighley, to be returned not later than FIRST POST, MONDAY, 4th SEPTEMBER, 1961.

J. A. CAESAR,
Town Clerk.

Town Hall,
Keighley.

NORTHERN IRELAND HOUSING TRUST.

ARCHITECTS.

The Northern Ireland Housing Trust has vacancies for ARCHITECTS, Class I "A," on scale £1,456-£1,950. Candidates must be Associates of the Royal Institute of British Architects.

The persons appointed will be required to contribute to a superannuation scheme which allows for the transfer of benefits in local government schemes in suitable cases.

Housing accommodation may be arranged for married candidates.

Please apply not later than 6th SEPTEMBER, 1961, giving details of age, education, qualifications and experience, including present post and salary to the General Manager, Northern Ireland Housing Trust, 12 Hope-street, Belfast 12.

Please mark envelope 33/93.

WEST SUFFOLK
COUNTY COUNCIL.

Applications are invited for the post of SENIOR ASSISTANT ARCHITECT within Grade "A" (£1,320-£1,565). Appointment subject to National Conditions of Service; two months' notice on either side; travelling allowance at casual user rate; schemes for payment of removal expenses and housing separation allowances in operation.

Application forms obtainable from the County Architect, 13, Westgate-street, Bury St. Edmunds, to be returned AS SOON AS POSSIBLE.

PADDINGTON
GENERAL HOSPITAL, HARROW ROAD, W.9.

FOREMAN required to supervise small staff in Building Maintenance Department. Routine maintenance works and minor new works. Basic wages, 5s. 10½d. per hour.

Apply, in writing, stating trade, experience, etc., to Superintendent Engineer.

LEICESTER CITY.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of CHIEF ASSISTANT ARCHITECT (EDUCATION SECTION).

Salary Scale "C" (£1,560-£1,825).

Housing accommodation provided in appropriate cases.

Five-day week in operation. Modern offices.

Applicants must be qualified and have considerable experience.

Applications, together with names of two referees, should reach the undersigned not later than MONDAY, 28th AUGUST, 1961.

J. H. LLOYD OWEN
City Architect.

Halford House,
Charles-street,
Leicester.

ATTENTION ADVERTISERS

Advertisements in this section must be received by **9 a.m. TUESDAY** to appear in the following **Friday's issue.** It is regretted that advertisements cannot be taken over the TELEPHONE.

OVERSEAS PUBLIC APPOINTMENTS

SUPERINTENDENT OF WORKS.

Required by FALKLAND ISLANDS GOVERNMENT, PUBLIC WORKS DEPARTMENT, on contract for one tour of 36 months in first instance. Fixed salary of £1,370 a year plus children's education allowances. Free passages for officer and wife and assistance with children's passages. Quarters available at moderate rental. Liberal leave on full salary.

Candidates should have served an apprenticeship to the building trade and have had several years' subsequent supervisory experience. Possession of relevant City and Guilds certificate or equivalent desirable but not essential.

Apply to CROWN AGENTS, 4 Millbank, London, S.W.1, for application form and further particulars, stating age, name, brief details of qualifications and experience, and quoting reference M2B/51403/.

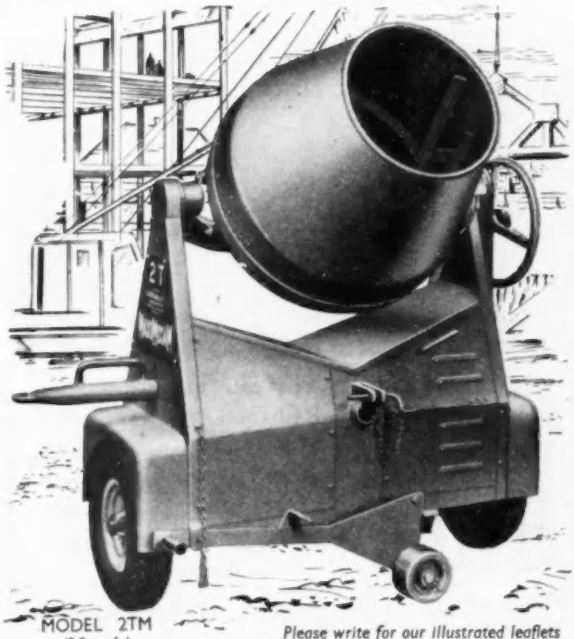
GOVERNMENT OF SARAWAK

WORKS SUPERINTENDENT (BUILDINGS).

Required by the PUBLIC WORKS DEPARTMENT, GOVERNMENT OF SARAWAK on contract for one tour of 36 months in first instance. Salary scale (including Inducement Pay), £1,176, rising to £1,932 a year. Gratuity at rate 12½ per cent. of total salary drawn. Child allowance £72 to £123 a year. Education Allowance up to £280 a year. Outfit allowance £60. Free passages. Quarters provided at moderate rental. Liberal leave on full pay.

Candidates must be skilled technicians with extensive experience in Public Works as Clerk of Works, Superintendent or General Foreman. A sound knowledge of building works in all trades is essential and some experience of small water purification systems or distribution systems an advantage.

Apply to CROWN AGENTS, 4, Millbank, London, S.W.1, for application form and further particulars, stating age, name, brief details of qualifications and experience and quoting reference M2B/51402/BH.



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CROWN ENGINEERING WORKS, SWADLINCOTE, Nr. BURTON-ON-TRENT
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(e) FINISHED IN CREAM ENAMEL.
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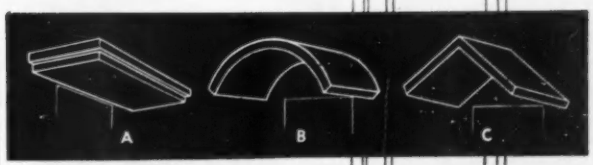
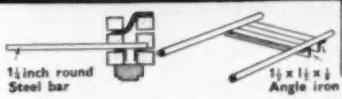
SEND FOR FOLDER ILLUSTRATING DESIGNS AND APPLICATION.





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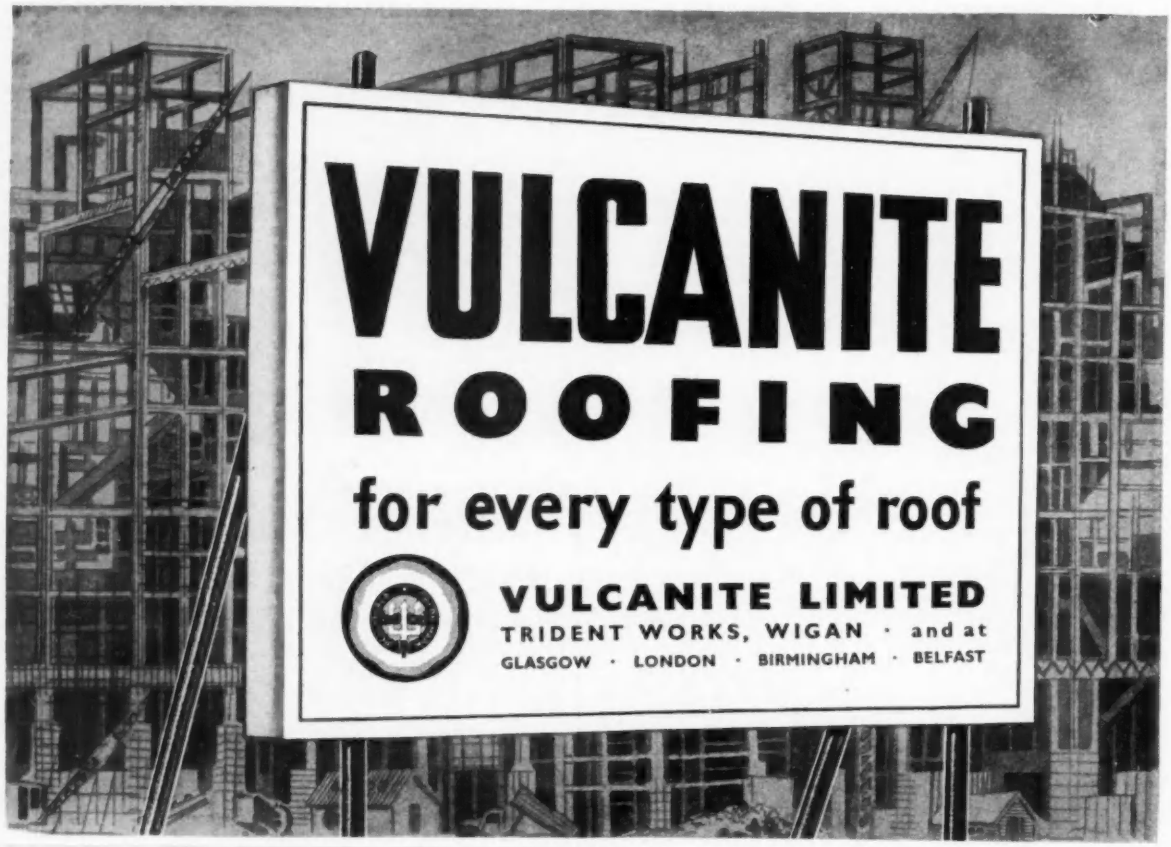
TELEPHONE: BURY 5034/5035



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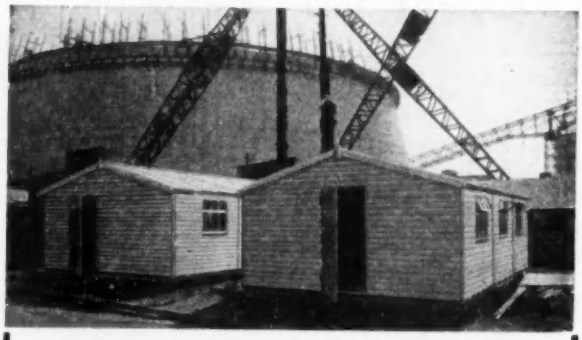

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Photograph by courtesy of Alexander Finley & Co. Ltd., Motherwell.

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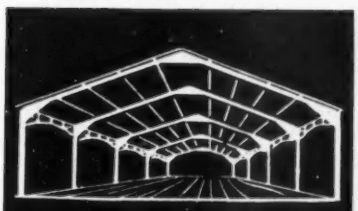
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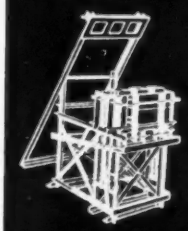
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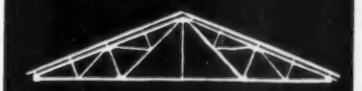
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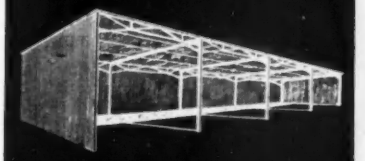
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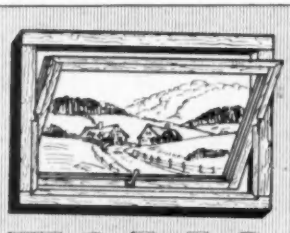

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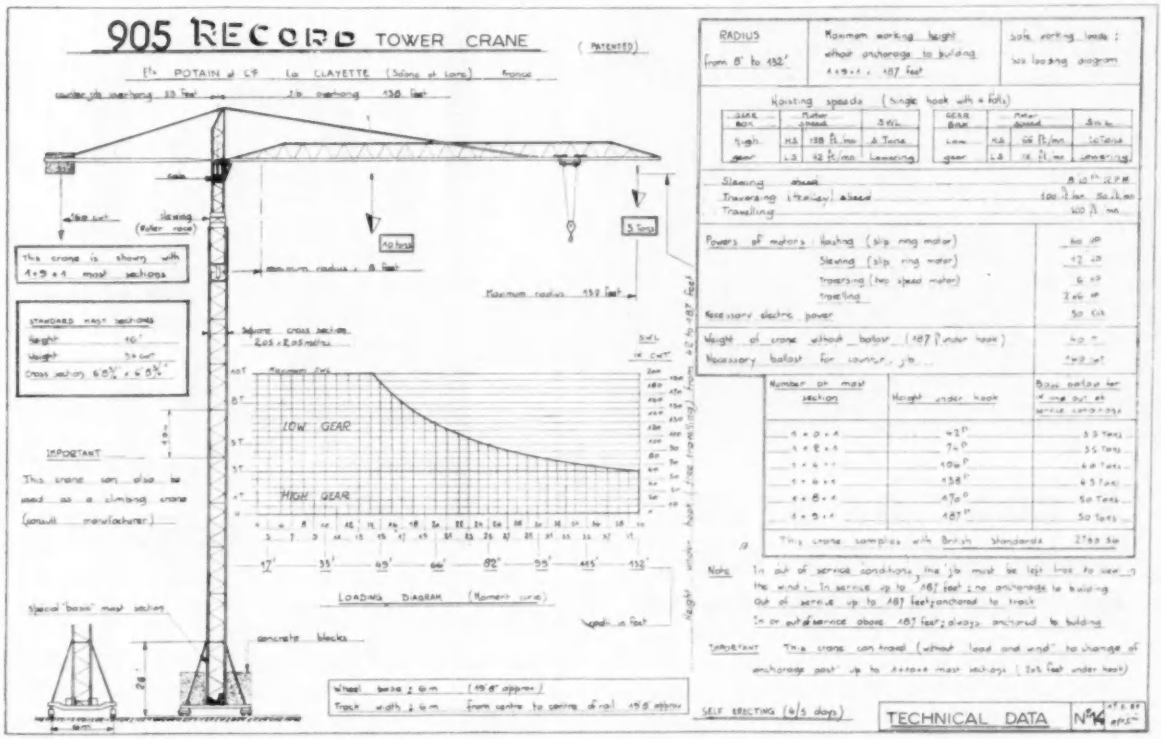

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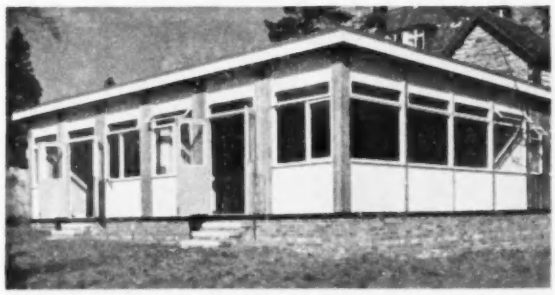

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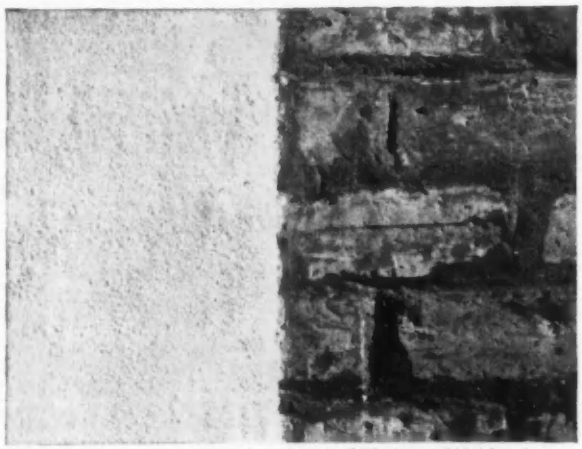

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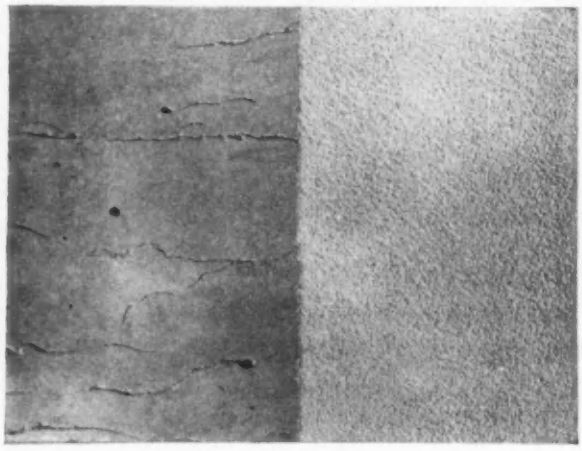

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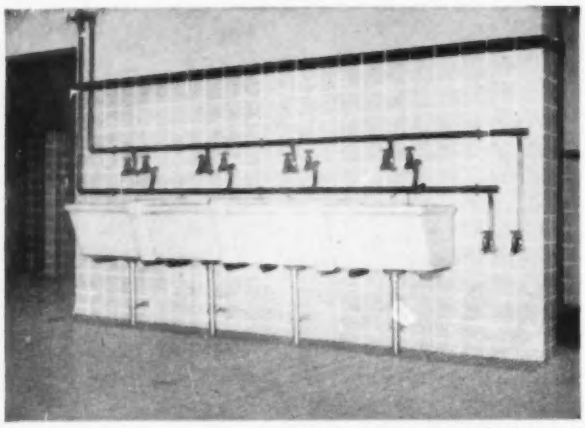

Photo by courtesy of Brynhyfrydd Hospital
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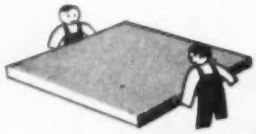

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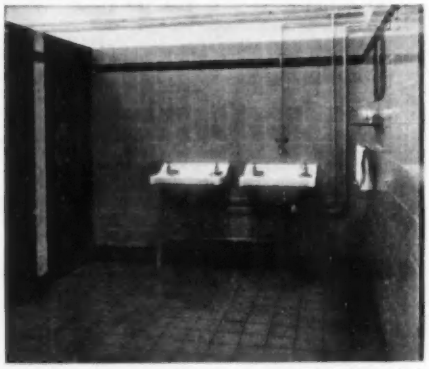

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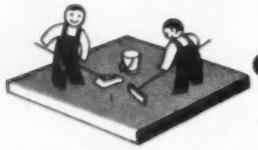

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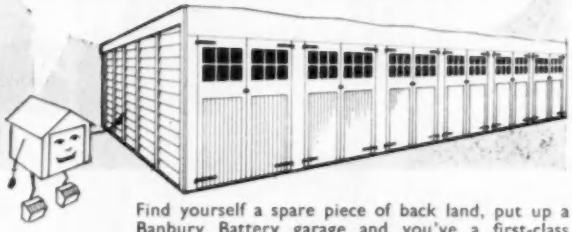

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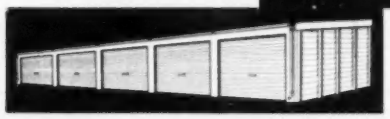

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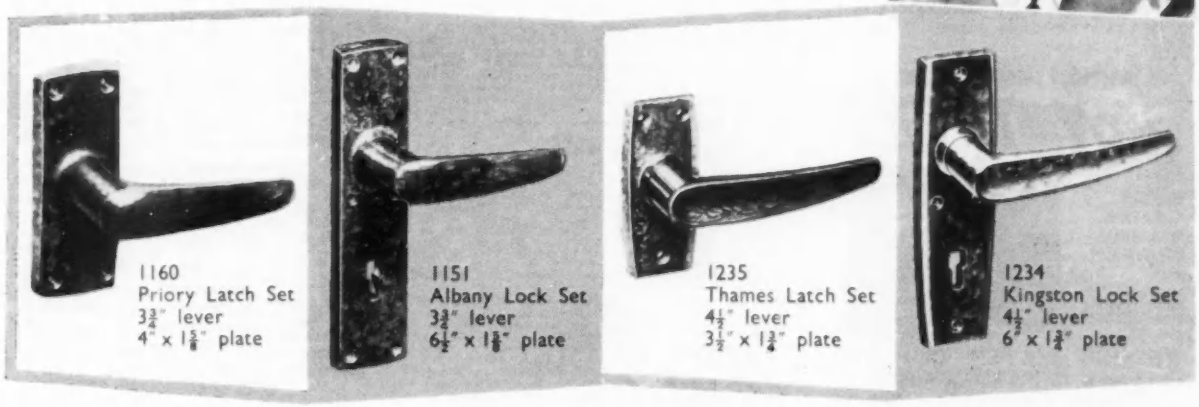

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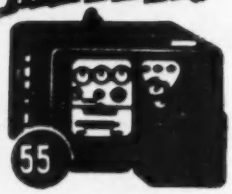

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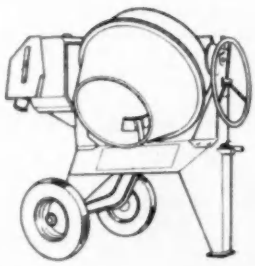

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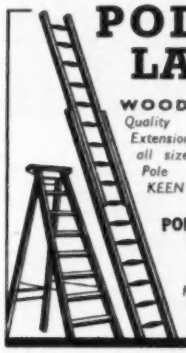

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Capable of handling all Surveying duties. Experience of Civil Engineering Contracts an advantage. Attractive salary and Bonus offered. Apply in writing, stating age and experience, to—

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Applicants should have had 3—5 years experience in a contractor's office or on site, and be ready to enlarge their experience and responsibility after having obtained a sound and good basic training in Contractor Surveyor's work.

Please write in confidence, giving age, training and experience, and an indication of salary required to Box LF 5507 A.K. Advg., 212a, Shaftesbury Avenue, London, W.C.2.

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Require

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Worker-Up

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ASSISTANT Required for small works department of London Building Contractors, experience essential in Taking-off, Estimating and supervising contracts up to £5,000. Write stating age, experience and salary required.—Box 6654, "The Builder."

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Excellent opportunities for promotion in an expanding organisation, with progressive salary, Pension Scheme and other attractive conditions. Assistance with housing considered.

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Excellent opportunities and well paid position to fully capable man. All types and sizes of contract.

Apply (in writing):
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connected with large Civil Engineering concern, invite applications for the following positions:

(A) **ESTIMATOR/SURVEYOR,** 25 to 40. Work with minimum supervision. Able price, take-off, handle surveying side contracts. Willing to adapt. Good possibilities ambitious man. I.O.B., I.Q.S. or similar preferred. Non-contributory Pension Scheme, Bonus. Salary according experience., etc., £800 to £1150. Located East London, but probable move Enfield area within two years.

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ASSISTANT ESTIMATOR Required with experience of estate development and general building. Excellent opportunity in rapidly expanding organisation.—Write, giving full details, to Box 6721, "The Builder."

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required in Surveyor's Department of London Brewery Company. Applicants should have experience in preparation of estimates and specifications for alterations and new work. Age group 30-45. The position is permanent with good salary, bonus, pension and life assurance scheme. Apply in writing, giving details of experience, age and salary required to

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wanted

to handle all duties from enquiry to final account on jobs up to £40,000. Experience of running jobs essential. Apply in writing, giving age, experience, and salary expected to:—

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SENIOR ESTIMATOR

required

by

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SENIOR

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Permanent vacancy for fully trained Estimator for progressive National B. and C.E. Contractor operating throughout the Midlands Area.

Previous experience with similar Contractor covering all types of Building work up to about £1M. in value and able to work on own initiative and can show recent past successful results. Suitable terms and conditions will be offered the selected applicant. Strict confidence will be observed to all applications.

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required for the development of a new planning and progressing department. Applications are welcomed from men with considerable experience in general and detailed planning backed with a sound building experience.
The position offered is pensionable.

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Applications are invited for the position of Project Manager on a large and interesting building contract overseas.

This is a Senior appointment with very real opportunities for advancement and promotion.

Salary according to qualifications and experience will be between £2,500 and £3,000 p.a., with free fully furnished married accommodation and other usual benefits. Tours will be 12 to 18 months with generous leave on full salary.

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Applications are invited from men, preferably under 45, and with considerable experience of site control and management of large-scale building contracts.

The successful applicant will become a permanent member of our Bradford Area Staff and will initially be assigned to an extensive project in the West Riding of Yorkshire.

This senior position offers a good salary and bonus with excellent staff conditions, including non-contributory pension and life assurance, a private car and assistance with housing if required.

Application forms will be forwarded to suitable candidates and initial replies giving brief details should be addressed to :

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Required to take control and be responsible for the Contracts Managers, their Department and for all building contracts acquired by the Group.

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Large Scottish Firm of

BUILDING CONTRACTORS

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Write in first instance, giving fullest particulars to

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CONTRACTS MANAGER to undertake complete supervision of public works and housing contracts in Cheshire and North Wales area. The position calls for an individual with marked ability to carry contracts through from inception to completion, including preparing schedules, negotiations with clients, local authorities, etc. Able to engage own staff and supervise all aspects of the company's projects in this area. There is every chance of the scope improving with advantage to the successful applicant providing it is warranted. Salary commensurate with ability.—Box 6672, "The Builder."

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WILSON & LOVATT & SONS LTD.,
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required for London

to take complete charge of Department under Directors.

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required

for Steel Reinforcement Specialists

Applicants must be experienced in this field of work, having own connections with Bldg. Contractors, Surveyors, etc. Excellent and lucrative position. Details of experience, etc., to:

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National Contractor invites applications for the appointment of Contracts Manager to augment an established Contracts Department.

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Car provided. Permanent pensionable position offered with good prospects.

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Are you competent to take responsibility for one or more building contracts

£200,000 — £1,000,000 ?

Are you interested in all aspects of contract planning and management?

Are you energetic and cost conscious?

Excellent opportunities in London and Home Counties available NOW.

Apply immediately in strictest confidence.

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ASSISTANT FOR MANAGER OF DEVELOPMENT COMPANY

Architectural or surveying experience essential. Fine opportunity for intelligent young man with initiative. This is a permanent superannuated post with excellent prospects.

Write for application form to

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ASSISTANT Required, able to estimate and prepare accounts for works up to £5,000 and maintenance work. Knowledge of plumbing and small bore heating an advantage.—Write, stating age, experience and salary required, to E. & S. BUILDERS, Ltd., 207 Station-road, Harrow.

BUILDERS' ASSISTANT Required, Victoria area. Some knowledge of quantities essential and drawing ability advantageous. A suitable young craftsman with O. or H.N.C., seeking an opening on the administrative side of the industry would be considered.—Write, giving details of experience, age and salary required, to Box 1065, c/o MURRAY & PHELAN, Ltd., Columbia House, Aldwych, W.C.2.

BUILDER'S ASSISTANT Required, West Essex, for complete control of small jobbing dept. and assistance with Estimating and Surveying of larger contracts. Experienced man, 40-50, preferred. Flat available. Write giving particulars, salary required. Box 6748, "The Builder."

YOUNG ASSISTANT Required for Builder's office. Experienced in Estimating and Site Supervision. Preferably with a trade background. State experience, salary required, to: C. & F. BRYEN, Ltd., 170 Hornsey-lane, London, N.6. ARC 3187.

ASSISTANT Required for Planning Department. Duties to include the progressing of current Contracts, co-ordination of Sub-Contractors and Suppliers.—Reply, stating age and previous experience, to The Secretary, TERSONS Ltd., Dollis Park, London, N.3, quoting reference S.C.

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Experienced in multi-storey reinforced concrete and general building work. Required immediately for large shop and office block in Birmingham. Apply in writing to J. Seymour Harris & Partners, 3/4, Greenfield Crescent, Birmingham 15, stating age, qualifications, previous experience, and names and addresses of two referees. Salary by arrangement.

UNIVERSITY OF OXFORD. CLERKS OF WORKS Required. Top-grade men, with wide experience in reinforced concrete and high-class finishings for group of buildings for Nuclear Physics Research and other projects. Duration of job approximately three years with possibility of further employment. Salary not less than £1,200.—Application in writing giving details of experience and names of two referees, to J. LANKESTER, M.A., A.R.I.C.S., A.M.T.P.I., Surveyor to the University, The Malthouse, Tidmarsh-lane, Oxford.

Imperial College
of Science and Technology
South Kensington, London

Architects and Consulting Engineers
Norman and Dawbarn

CLERKS OF WORKS

Applications are invited for the appointment of Clerks of Works required on works of some magnitude at the above development. Experience in the supervision of reinforced concrete and structural steelwork is essential and special knowledge of mechanical services would be an advantage.

More than one appointment will be made at salaries from £950 to £1,200 according to experience and ability.

Write, giving age, experience and salary required, to:

Norman and Dawbarn,
Architects and Consulting Engineers,
7 Portland Place, London, W.1

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BUYER Required for company operating extensive estate development and general building. Successful applicant must have thorough knowledge of building materials.—Apply, with full details, to Box 6720, "The Builder."

BUYER Required for Sussex coast area of large house building organisation with headquarters in London. Write full particulars of experience and salary required.—Box 6757, "The Builder."

CHIEF BUYER for National Building Contractors with London Head Office.—Full details to the Managing Director, c/o Box 6779, "The Builder."

ASSISTANT BUYER

required in West Middlesex area

Applicant must be experienced in all phases of surveying and in agreeing final accounts. Opportunity to understudy Estimator. Full details to

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CHIEF BUYER requires experienced assistant with good knowledge of Building Materials, Schedules, Plant, etc. Life Assurance and Pension Scheme in operation. Previous holiday arrangements will be honoured.

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CHIEF BUYER

and

ASSISTANT BUYERS

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SALES REPRESENTATIVE wanted on commission basis by company producing Reconstructed Stone and precast Concrete.—Box 6736, "The Builder."

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AGENT Required by Civil Engineering and Building Contractors operating in Southern England, for control of contracts up to £100,000. Youngish man preferred. Continuity of work is available in an organisation where prospects are directly related to ability. The initial appointment is for a Trunk Road Development at Redhill, Surrey.—Write, giving age, experience and salary required, to: NICHOLSON CONSTRUCTION CO., Ltd., Freeland House, Cranleigh, Surrey.

FIRST-CLASS AGENT

required for large reinforced concrete superstructure contract in Oxfordshire area. Good salary offered to the right man. Bonus etc. can be discussed during interview. Apply in confidence stating age, experience and previous employer to

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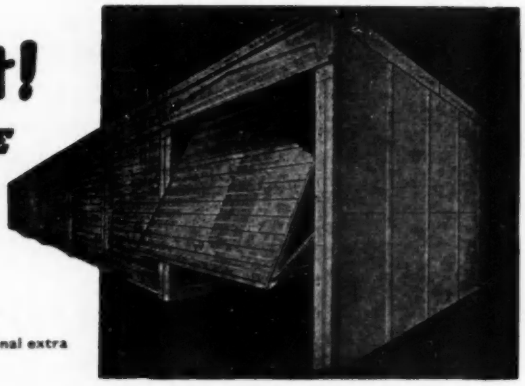

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